

State of California  
The Resources Agency

DEPARTMENT OF WATER RESOURCES  
Division of Operations and Maintenance

# STATE WATER PROJECT OPERATIONS DATA

For the month of:  
**March 2004**

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Governor  
**State of California**

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Secretary for Resources  
**The Resources Agency**

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State of California  
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## **MONTHLY HIGHLIGHTS**

The following highlights are activities or actions that impacted State Water Project operations during the month of March 2004.

Statewide precipitation was 95 percent of average for the 2003-2004 water year as of March 31. Statewide runoff was 90 percent of average for the water year. Precipitation percentages are used in this report to express historical and regional comparisons. Additional and more specific information is available via the internet at: "[http://cdec.water.ca.gov/snow\\_rain.html](http://cdec.water.ca.gov/snow_rain.html)".

Total storage in major SWP reservoirs on March 31 was about 4.8 MAF, compared with about 4.25 MAF at this time in 2003. Average storage in the major SWP reservoirs on March 31 was about 4.33 MAF. End of month storage at Lake Oroville was about 3.05 MAF as compared to 2.62 MAF last year. The State's share of San Luis Reservoir storage was about 939 TAF, as compared with 986 TAF at this time last year. End of month combined storage in our southern reservoirs was about 664 TAF, compared with about 636 TAF at this time last year.

Through March, SWP water deliveries for 2004 were about 769 TAF. This is a combination of project, transfer, and exchange waters. This is 217 TAF more than that delivered during the same period in 2003.

**Table 1. Antelope Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 22,566 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Feb 29	4994.60	16,275									
1	4994.65	16,313	38	10	0	0	0	2	12	31	
2	4994.65	16,313	0	10	0	0	0	2	12	12	
3	4994.71	16,360	47	10	0	0	0	2	12	36	
4	4994.74	16,383	23	10	0	0	0	2	12	24	
5	4994.77	16,406	23	10	0	0	0	2	12	24	
6	4994.81	16,437	31	10	0	0	0	2	12	28	
7	4994.90	16,506	69	10	0	0	0	2	12	47	
8	4995.02	16,599	93	10	0	0	0	2	12	59	
9	4995.20	16,740	141	10	0	0	0	2	12	83	
10	4995.40	16,896	156	10	0	0	0	2	12	91	
11	4995.62	17,070	174	10	0	0	0	2	12	100	
12	4995.82	17,228	158	10	0	0	0	2	12	92	
13	4996.06	17,420	192	10	0	0	0	2	12	109	
14	4996.32	17,629	209	10	0	0	0	2	12	117	
15	4996.60	17,855	226	10	0	0	0	2	12	126	
16	4996.87	18,075	220	10	0	0	0	2	12	123	
17	4997.16	18,305	230	10	0	0	0	2	12	128	
18	4997.50	18,595	290	10	0	0	0	2	12	158	
19	4997.88	18,913	318	10	0	0	0	2	12	172	
20	4998.28	19,251	338	10	0	0	0	1	11	181	
21	4998.68	19,592	341	10	0	0	0	1	11	183	
22	4999.08	19,938	346	10	0	0	0	1	11	185	
23	4999.48	20,286	348	10	0	0	0	1	11	186	
24	4999.86	20,621	335	10	0	0	0	1	11	180	
25	5000.22	20,948	327	10	0	0	0	1	11	176	
26	5000.46	21,161	213	10	0	0	0	1	11	118	
27	5000.68	21,359	198	10	0	0	0	1	11	111	
28	5000.88	21,539	180	10	0	0	0	1	11	102	
29	5001.12	21,756	217	10	0	0	0	1	11	120	
30	5001.38	21,993	237	10	0	0	0	1	11	130	
31	5001.63	22,222	229	10	0	0	0	1	11	126	
Total cfs-days				---	310	0	0	0	50	360	3,358
Total ac-ft				5,947	615	0	0	0	99	714	6,661

**Table 2. Frenchman Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 55,477 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs					Computed Inflow	
				Regulated Release			Spill	Estimated Evaporation And Seepage		
				Stream-flow Maint.	Water Supply Contract	Water Right				
Feb 29	5566.35	27,500								
1	5566.44	27,591	91	2	0	0	0	3	5	
2	5566.44	27,591	0	2	0	0	0	3	5	
3	5566.45	27,601	10	2	0	0	0	3	5	
4	5566.50	27,652	51	2	0	0	0	2	4	
5	5566.54	27,693	41	2	0	0	0	2	4	
6	5566.54	27,693	0	2	0	0	0	2	4	
7	5566.62	27,775	82	2	0	0	0	2	4	
8	5566.70	27,857	82	2	0	0	0	2	4	
9	5566.85	28,011	154	2	0	0	0	2	4	
10	5566.99	28,155	144	2	0	0	0	2	4	
11	5567.23	28,404	249	2	0	0	0	2	4	
12	5567.41	28,592	188	2	0	0	0	2	4	
13	5567.59	28,780	188	2	0	0	0	2	4	
14	5567.78	28,979	199	2	0	0	0	2	4	
15	5567.98	29,190	211	2	0	0	0	2	4	
16	5568.20	29,423	233	2	0	0	0	2	4	
17	5568.41	29,646	223	2	0	0	0	2	4	
18	5568.64	29,892	246	2	0	0	0	2	4	
19	5568.83	30,096	204	2	0	0	0	2	4	
20	5569.07	30,335	239	2	0	0	0	2	4	
21	5569.25	30,550	215	2	0	0	0	2	4	
22	5569.55	30,876	326	2	0	0	0	2	4	
23	5569.76	31,106	230	2	0	0	0	2	4	
24	5569.85	31,205	99	2	0	0	0	2	4	
25	5570.09	31,469	264	2	0	0	0	2	4	
26	5570.14	31,525	56	2	0	0	0	2	4	
27	5570.23	31,624	99	2	0	0	0	2	4	
28	5570.31	31,712	88	2	0	0	0	2	4	
29	5570.44	31,858	146	2	0	0	0	2	4	
30	5570.55	31,980	122	2	0	0	0	2	4	
31	5570.63	32,070	90	2	0	0	0	2	4	
Total cfs-days				---	62	0	0	65	127	
Total ac-ft				4,570	123	0	0	128	251	
									4,821	

**Table 3. Lake Davis**

Daily Operation  
(in acre-feet except as noted)

Capacity: 84,371 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow	
				Regulated Release			Spill	Estimated Evaporation And Seepage	Total Outflow		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Feb 29	5763.80	45,780									
1	5763.76	45,665	-115	100	0	0	0	6	106	48	
2	5763.69	45,466	-199	100	0	0	0	6	106	6	
3	5763.62	45,267	-199	100	0	0	0	6	106	6	
4	5763.55	45,068	-199	100	0	0	0	6	106	6	
5	5763.50	44,870	-198	100	0	0	0	6	106	6	
6	5763.48	44,701	-169	100	0	0	0	6	106	21	
7	5763.36	44,532	-169	100	0	0	0	6	106	21	
8	5763.31	44,392	-140	100	0	0	0	6	106	36	
9	5763.30	44,363	-29	100	0	0	0	6	106	91	
10	5763.30	44,363	0	100	0	0	0	6	106	106	
11	5763.32	44,420	57	42	0	0	0	6	48	77	
12	5763.44	44,757	337	10	0	0	0	6	16	186	
13	5763.54	45,040	283	10	0	0	0	6	16	159	
14	5763.67	45,409	369	10	0	0	0	6	16	202	
15	5763.79	45,751	342	10	0	0	0	6	16	189	
16	5763.93	46,152	401	10	0	0	0	6	16	218	
17	5764.05	46,498	346	10	0	0	0	6	16	190	
18	5764.21	46,961	463	10	0	0	0	6	16	249	
19	5764.42	47,572	611	10	0	0	0	6	16	324	
20	5764.57	48,012	440	10	0	0	0	6	16	238	
21	5764.73	48,848	836	10	0	0	0	6	16	437	
22	5764.89	48,958	110	10	0	0	0	6	16	71	
23	5765.03	49,378	420	10	0	0	0	6	16	228	
24	5765.14	49,706	328	10	0	0	0	6	16	181	
25	5765.31	50,216	510	10	0	0	0	5	15	272	
26	5765.38	50,427	211	10	0	0	0	5	15	121	
27	5765.43	50,578	151	10	0	0	0	5	15	91	
28	5765.49	50,759	181	10	0	0	0	5	15	106	
29	5765.55	50,941	182	10	0	0	0	5	15	107	
30	5765.59	51,062	121	10	0	0	0	5	15	76	
31	5765.67	51,306	244	8	3	0	0	5	15	138	
Total cfs-days				---	1,240	3	0	0	179	1,421	4,207
Total ac-ft				5,526	2,459	5	0	0	356	2,820	8,346

**Table 4. Lake Oroville**

Daily Operation

(in acre-feet except as noted)

Capacity: 3,537,580 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow					Inflow	
				Hyatt Powerplant Generation 1/	Palermo Canal	Evaporation 2/	Spill	Total Outflow	Hyatt Powerplant Pumpback	Computed Inflow 3/
Feb 29	854.01	2,862,905								
	1	2,858,149	-4,756	25,943	0	52	2,215	28,210	0	23,454
	2	2,849,061	-9,088	26,663	0	37	0	26,700	0	17,612
	3	2,844,457	-4,604	24,972	0	154	0	25,126	0	20,522
	4	2,844,998	541	14,800	0	73	0	14,873	0	15,414
	5	2,847,164	2,166	12,600	0	110	0	12,710	0	14,876
	6	2,845,675	-1,489	13,416	0	44	0	13,460	0	11,971
	7	2,846,081	406	13,719	0	110	0	13,829	0	14,235
	8	2,845,946	-135	17,133	0	102	0	17,235	0	17,100
	9	2,856,656	10,710	6,636	3	154	0	6,793	0	17,503
	10	2,871,070	14,414	3,914	6	206	0	4,126	0	18,540
	11	2,884,989	13,919	5,130	6	303	0	5,439	0	19,358
	12	2,899,916	14,927	4,500	6	135	0	4,641	0	19,568
	13	2,918,478	18,562	1,320	6	208	0	1,534	0	20,096
	14	2,937,955	19,477	2,445	6	202	0	2,653	2,667	19,463
	15	2,950,573	12,618	6,805	6	180	0	6,991	1,450	18,159
	16	2,964,484	13,911	8,577	6	339	0	8,922	0	22,833
	17	2,974,109	9,625	11,311	6	333	0	11,650	0	21,275
	18	2,985,016	10,907	9,992	6	189	0	10,187	0	21,094
	19	2,996,934	11,918	9,780	6	152	0	9,938	0	21,856
	20	3,002,976	6,042	15,356	6	289	0	15,651	0	21,693
	21	3,005,648	2,672	16,656	6	213	0	16,875	0	19,547
	22	3,012,126	6,478	16,684	6	183	0	16,873	0	23,351
	23	3,021,012	8,886	13,341	6	122	0	13,469	0	22,355
	24	3,022,425	1,413	19,807	6	92	0	19,905	0	21,318
	25	3,023,979	1,554	20,160	6	145	0	20,311	0	21,865
	26	3,029,069	5,090	15,391	6	31	0	15,428	0	20,518
	27	3,040,685	11,616	6,971	7	77	0	7,055	0	18,671
	28	3,050,769	10,084	6,709	6	154	0	6,869	0	16,953
	29	3,049,489	-1,280	15,803	6	123	0	15,932	0	14,652
	30	3,058,311	8,822	6,925	6	169	0	7,100	0	15,922
	31	3,066,010	7,699	8,104	6	85	0	8,195	0	15,894
<b>Total</b>				203,105	381,563	136	4,766	2,215	388,680	4,117
<b>587,668</b>										

1/ Includes bypass flows

2/ Evaporation will be zero for days when there is precipitation or heavy overcast.

3/ Does not include pumpback.

**Table 5. Thermalito Forebay  
Including Diversion Pool and Power Canal**

Capacity: 25,120 ac-ft

Daily Operation  
(in acre-feet except as noted)

**March 2004**

Date	Storage 1/	Storage Change	Inflow			Outflow					Losses (-) And Gains (+)
			Lake Oroville Releases 2/	Kelly Ridge Generation	Thermalito Pumping- Generating Plant Pumpback	Thermalito Pumping- Generating Plant Generation 3/	Butte County 4/	Thermalito Irrigation District	Releases To River 5/	Hyatt Powerplant Pumpback	
Feb 29	22,904										
1	22,980	76	28,158	508	0	25,525	7	4	4,042	0	988
2	23,766	786	26,663	509	0	24,119	7	4	3,667	0	1,411
3	24,058	292	24,972	509	0	21,096	7	4	3,211	0	-871
4	24,311	253	14,800	504	0	12,638	7	4	2,894	0	492
5	24,272	-39	12,600	509	0	10,932	7	4	2,455	0	250
6	24,167	-105	13,416	486	0	11,727	7	4	2,059	0	-210
7	24,183	16	13,719	534	0	12,802	7	4	1,676	0	252
8	23,719	-464	17,133	486	0	17,122	7	4	1,333	0	383
9	24,060	341	6,636	509	0	5,758	7	4	1,251	0	216
10	24,400	340	3,914	509	0	2,978	7	4	1,249	0	155
11	24,275	-125	5,130	509	0	4,674	7	4	1,249	0	170
12	24,534	259	4,500	518	0	3,608	7	4	1,251	0	111
13	23,376	-1,158	1,320	488	0	1,610	7	4	1,255	0	-90
14	24,065	689	2,445	303	3,629	2,475	7	4	1,255	2,667	720
15	24,013	-52	6,805	496	1,533	6,448	7	4	1,259	1,450	282
16	23,937	-76	8,577	502	0	7,956	7	4	1,263	0	75
17	23,403	-534	11,311	563	0	11,217	7	4	1,251	0	71
18	23,849	446	9,992	440	0	8,853	7	4	1,263	0	141
19	23,797	-52	9,780	454	0	9,233	7	4	1,259	0	217
20	23,824	27	15,356	502	0	14,686	7	4	1,259	0	125
21	24,058	234	16,656	504	0	15,907	7	5	1,263	0	256
22	23,851	-207	16,684	575	0	16,404	7	5	1,245	0	195
23	23,872	21	13,341	446	0	12,706	7	5	1,251	0	203
24	23,413	-459	19,807	510	0	19,400	7	5	1,259	0	-105
25	23,038	-375	20,160	510	0	20,096	8	5	1,273	0	337
26	23,518	480	15,391	510	0	14,216	8	5	1,259	0	67
27	24,604	1,086	6,971	508	0	5,182	8	5	1,265	0	67
28	24,010	-594	6,709	508	0	6,636	8	5	1,255	0	93
29	23,789	-221	15,803	508	0	15,556	8	5	1,255	0	292
30	23,806	17	6,925	589	0	6,060	8	5	1,259	0	-165
31	23,735	-71	8,104	434	0	7,510	8	5	1,257	0	171
Total		831	383,778	15,440	5,162	355,130	224	135	50,242	4,117	6,299

1/ Sum of Thermalito Forebay and Diversion Pool.

4/ Includes 3 AF of entitlement water to Del Oro WD and 221 AF to Cal Water.

2/ Sum of generation and bypass flows through Hyatt plant, and spill.

5/ The sum of the flows from fish barrier dam and the fish hatchery.

3/ Includes Bypass flows at Thermalito.

**Table 6. Thermalito Afterbay**

Daily Operation

(in acre-feet except as noted)

Capacity: 57,040 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow					Losses (-) and Gains (+)	Total Releases to River 2/
				Thermalito Pumping-Generating Plant Generation 1/	Sutter Butte Canal	Western Canal Lateral	Richvale Canal	Western Canal	Afterbay River Outlet	Thermalito Pumping-Generating Plant Pumpback		
Feb 29	131.71	38,070										
1	131.60	37,675	-395	25,525	0	0	0	0	24,000	0	-1,920	28,042
2	131.46	37,175	-500	24,119	0	0	0	0	24,397	0	-222	28,064
3	130.35	33,325	-3,850	21,096	0	0	0	0	24,794	0	-152	28,005
4	130.02	32,218	-1,107	12,638	0	0	0	0	13,190	0	-555	16,084
5	130.91	35,243	3,025	10,932	0	0	0	0	7,537	0	-370	9,992
6	131.94	38,901	3,658	11,727	0	0	0	0	7,974	0	-95	10,033
7	133.04	42,994	4,093	12,802	0	0	0	0	8,370	0	-339	10,046
8	135.06	50,985	7,991	17,122	0	0	0	0	8,668	0	-463	10,001
9	134.51	48,751	-2,234	5,758	0	0	0	0	7,775	0	-217	9,026
10	133.57	45,034	-3,717	2,978	0	0	0	0	6,744	0	49	7,993
11	133.02	42,918	-2,116	4,674	0	0	0	0	6,744	0	-46	7,993
12	132.11	39,521	-3,397	3,608	0	0	0	0	6,744	0	-261	7,995
13	130.66	34,380	-5,141	1,610	0	0	0	0	6,744	0	-7	7,999
14	128.19	26,403	-7,977	2,475	0	0	0	0	6,744	3,629	-79	7,999
15	127.43	24,150	-2,253	6,448	0	0	0	0	6,764	1,533	-404	8,023
16	127.84	25,353	1,203	7,956	0	0	0	0	6,764	0	11	8,027
17	129.35	30,025	4,672	11,217	0	0	0	0	6,764	0	219	8,015
18	129.91	31,853	1,828	8,853	0	0	0	0	6,744	0	-281	8,007
19	130.01	32,185	332	9,233	0	0	0	0	8,727	0	-174	9,986
20	131.60	37,675	5,490	14,686	0	0	0	0	8,747	0	-449	10,006
21	133.42	44,452	6,777	15,907	0	0	0	0	8,767	0	-363	10,030
22	134.65	49,315	4,863	16,404	0	0	0	0	11,207	0	-334	12,452
23	133.09	43,185	-6,130	12,706	0	0	0	0	18,724	0	-112	19,975
24	133.16	43,452	267	19,400	0	0	0	0	18,724	0	-409	19,983
25	133.45	44,568	1,116	20,096	0	0	0	0	18,724	0	-256	19,997
26	133.00	42,842	-1,726	14,216	0	0	0	0	15,808	0	-134	17,067
27	131.73	38,142	-4,700	5,182	0	0	0	0	9,759	0	-123	11,024
28	131.55	37,496	-646	6,636	0	0	0	0	7,279	0	-3	8,534
29	133.91	46,365	8,869	15,556	0	0	0	0	6,764	0	77	8,019
30	133.98	46,642	277	6,060	0	0	0	0	5,732	0	-51	6,991
31	134.59	49,073	2,431	7,510	0	0	0	0	4,760	0	-319	6,017
<b>Total</b>		<b>11,003</b>		<b>355,130</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>331,183</b>	<b>5,162</b>	<b>-7,782</b>	<b>381,425</b>

1/ Includes Bypass flows at Thermalito.

2/ The sum of the flows from the fish barrier dam, fish hatchery, and afterbay river outlet.

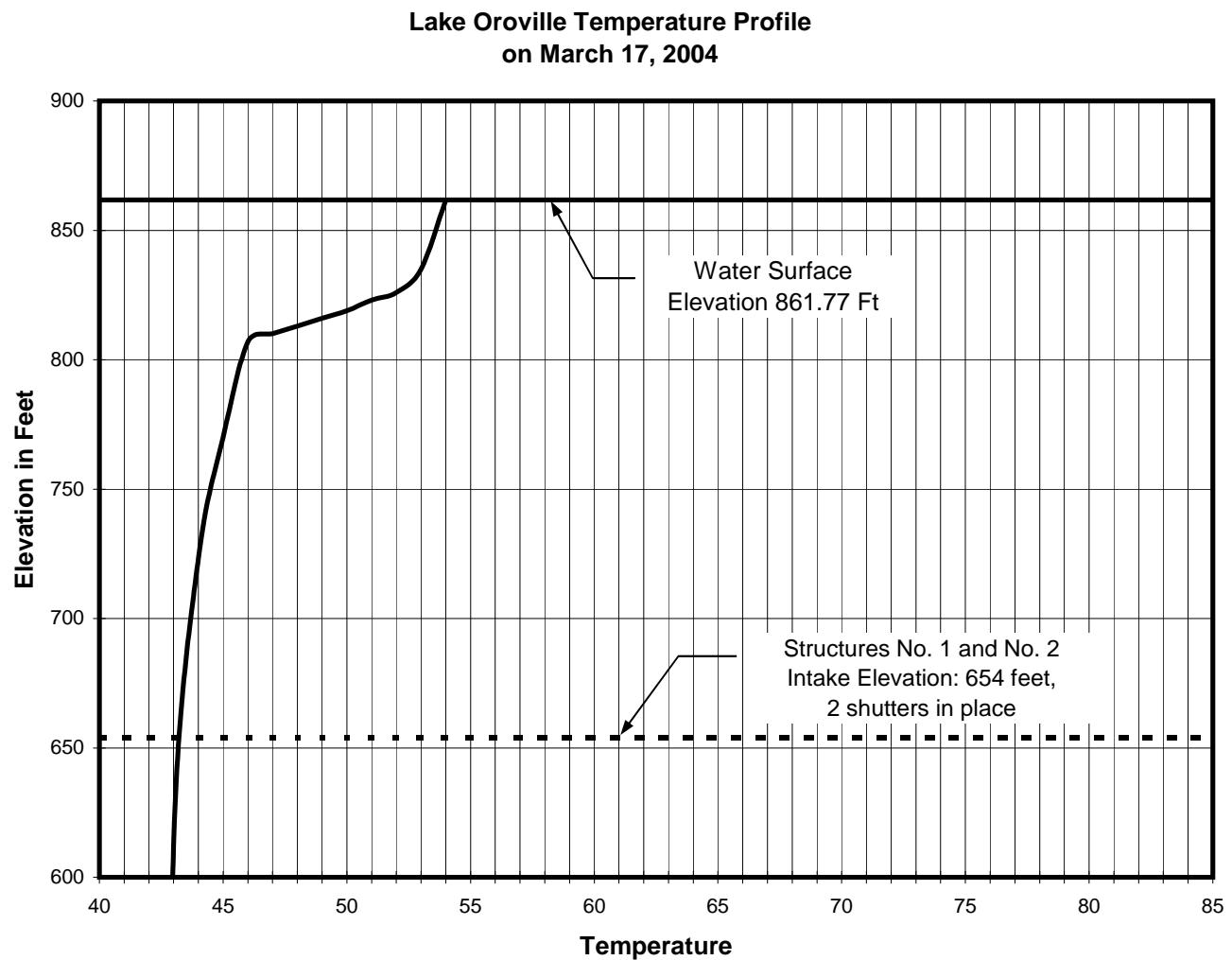
**Table 7. Oroville-Thermalito Complex**

Water Temperature Data

(in degrees Fahrenheit)

**March 2004**

Date	Mean Daily Temperature	
	Thermalito Afterbay Outlet	Fish Hatchery
1	46	45
2	46	45
3	46	45
4	46	45
5	47	45
6	47	45
7	49	45
8	49	45
9	51	45
10	52	46
11	51	46
12	53	46
13	54	46
14	54	47
15	55	48
16	56	47
17	57	46
18	56	46
19	55	46
20	55	46
21	53	46
22	51	46
23	50	46
24	50	46
25	48	46
26	48	46
27	49	46
28	50	46
29	51	46
30	51	47
31	52	48



Note: Water surface elevations on Table 4 are taken at Oroville Dam at midnight and may differ slightly from those shown on this table which are normally taken at mid-day and upstream from Oroville Dam.

**Table 8. North Bay Aqueduct**  
Delta Field Division, Monthly Deliveries

(In acre-feet)

March 2004

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending					Table A Amount		Permit	Article 21 Water		
	No.	Structure	Mile			M & I	Benicia				
1	1	Barker Slough Pumping Plant	0.17	(Into the North Bay Aqueduct)	612						
		Travis Surge Tank	8.78								
			8.80	Solano County Water Agency Travis Turnout	33				33		
			10.54	Solano County Water Agency Fairfield / Vacaville 24"	71				71		
				Solano County Water Agency Fairfield / Vacaville 42"	0						
			17.00	Solano County Water Agency Central Solano	Stub						
		Cordelia Forebay	21.23								
		Cordelia Pumping Plant & Cordelia Spillway	21.30		393						
		Napa Pipeline	21.33	Solano County Water Agency Vallejo	0						
				Solano County Water Agency Benicia	164				164		
3B	2	Cordelia Surge Tank	23.33								
		Creston Surge Tank Connection	25.65								
			26.95	Napa County Flood Control & WCD American Canyon 2	49				49		
			27.27	Napa County Flood Control & WCD American Canyon 3	0						
		Napa Terminal Tank	27.58	City of Napa	178				178		
			27.60	Napa County Flood Control & WCD American Canyon 1	2				2		

**Table 9. Delta Field Division Plant Data**

(in acre-feet)

**March 2004**

Date	North Bay Aqueduct		California Aqueduct		South Bay Aqueduct			
	Barker Slough Pumping Plant	Cordelia Pumping Plant	Banks Pumping Plant		South Bay Pumping Plant	Del Valle Pumping Plant		
			Total	SWP		Into Lake	Into Aqueduct	Gravity Flow Through Plant Into Aqueduct
1	60	42	15,661	15,661	150	0	0	0
2	60	43	15,415	15,415	158	0	0	0
3	60	39	12,971	12,971	182	0	0	0
4	61	42	15,222	15,222	184	0	0	0
5	54	36	15,269	15,269	272	0	0	0
6	55	39	14,877	14,877	244	0	0	0
7	55	42	14,851	14,851	280	0	0	0
8	62	44	14,842	14,842	308	0	0	0
9	35	17	15,454	15,454	282	0	0	0
10	4	4	15,073	15,073	280	0	0	0
11	0	0	15,058	15,058	336	0	0	0
12	0	0	15,137	15,137	361	0	0	0
13	0	0	15,307	15,307	362	0	0	18
14	0	0	15,212	15,212	299	0	0	58
15	0	0	15,882	15,882	220	0	0	199
16	0	0	13,635	13,635	220	0	0	214
17	0	0	12,828	12,828	211	0	0	204
18	0	0	12,908	12,908	220	0	0	211
19	0	0	12,992	12,992	262	0	0	189
20	0	0	13,002	13,002	341	0	0	102
21	0	0	12,181	12,181	407	0	0	32
22	0	0	11,437	11,437	466	0	0	0
23	0	0	10,888	10,888	435	0	0	0
24	0	0	10,622	10,622	596	94	0	0
25	0	0	13,033	13,033	651	190	0	0
26	0	0	12,959	12,959	629	219	0	0
27	48	0	12,881	12,881	629	221	0	0
28	15	0	13,110	13,110	618	221	0	0
29	0	0	13,168	13,168	627	220	0	0
30	15	18	10,225	10,225	638	220	0	0
31	28	27	11,047	11,047	630	219	0	0
Total	612	393	423,147	423,147	11,498	1,604	0	1,227

**Table 10. Clifton Court Forebay**

Daily Operation of Gates

**March 2004**

Date	Time								Amount of inflow in Acre-Feet
	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	
1	---	12:30	14:30	19:30					15,855
2	0:30	13:15	15:15	21:00					15,652
3	1:15	14:00	16:15	22:45					13,445
4	1:45	14:45	17:00	21:30					15,459
5	2:30	15:15	17:45	22:20					15,247
6	3:00	16:00	18:30	---					15,157
7	---	0:30	3:30	16:30	19:15	---			14,248
8	---	1:00	4:00	13:20	15:10	17:15	20:00	---	14,821
9	---	1:30	4:30	13:47	16:25	18:00	20:45	---	15,364
10	---	6:00	9:00	14:45	17:45	23:45			15,353
11	0:01	6:45	9:45	15:45	18:45	---			14,563
12	---	7:30	10:30	16:45	19:45	---			15,203
13	---	8:30	11:15	17:30	21:00	---			15,219
14	---	9:45	12:30	18:43	22:30	---			14,200
15	---	11:15	13:45	18:20	23:30	23:33			15,259
16	0:01	12:30	15:00	16:35					13,248
17	0:30	13:45	16:14	18:20					13,218
18	1:30	14:30	17:00	19:00					13,241
19	2:00	10:45	12:40	15:15	17:45	21:10			13,058
20	2:45	11:00	14:00	16:00	18:45	22:32			13,148
21	0:01	0:30	3:30	16:45	19:30	---			13,236
22	---	1:00	4:00	12:30	15:40	17:30	20:15	---	13,204
23	---	5:30	8:15	13:10	17:00	---			12,119
24	---	1:00	3:00	6:00	8:45	13:30	17:45	---	10,114
25	---	6:30	9:15	13:55	18:30	---			11,826
26	---	7:00	9:05	15:30	19:15	---			12,787
27	---	8:00	10:30	15:10	20:15	---			10,815
28	---	9:15	11:30	17:04	21:30	---			12,615
29	---	11:00	12:30	16:58	22:30	---			13,126
30	---	12:00	13:45	17:15					12,747
31	0:30	13:00	16:45	19:40					9,219
Total inflow for the month in AF:									422,766

**Table 11. Governor Edmund G. Brown California Aqueduct**  
 Delta Field Division, Monthly Deliveries

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending		No.			Table A Amount	USBR	Local	Loan Water	Extended Table A Carryover	
	No.	Structure	Mile								
1	1	Banks Pumping Plant	3.32		423,147						
		South Bay Pumping Plant	4.49	Bethany Reservoir Inlet	11,498						
		Check No. 1	5.95								
			8.00	Mountain House Golf Course	5					5	
	2	Check No. 2	12.01								
			12.47	Musco Olive	34		34				
		Check No. 3	18.29								
	3		22.16	Tracy Golf & Country Club	0						
		Check No. 4	23.99								
	4	Check No. 5	29.73								
		Check No. 6	34.24								
	5		35.22	Turlock Fruit Company Inflow	0						
		Check No. 7	39.91								
2A	6		42.46	Oak Flat Water District-A	1					1	
			42.9	Western Hills WD	51	51				41	
			43.81	Oak Flat Water District-B	41					56	
			44.64	Oak Flat Water District-C	56					112	
		Check No. 8	45.97								
	7		46.18	Oak Flat Water District-D	112						
				Oak Flat Totals:	210	0	0	0	0	210	
	8	Check No. 9	51.3								
		Check No. 10	56.86								
		Check No. 11	61.4								
2B	9		66.14	Veteran's Cemetery	2		2				
		Check No. 12	66.71								

**Table 12. South Bay Aqueduct**  
Delta Field Division, Monthly Deliveries

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	Article 21 Water	Extended Table A Carryover	Local	Recreation		
	No.	Structure	Mile									
1	1	South Bay Pumping Plant	0.00	(into South Bay Aqueduct)	11,498				1			
			3.17	Granite - Vasco Rd. (Temp.)	0							
			3.18	Oakland Scavenger Zone 7	1							
	2	Check No. 1	3.91									
2	3		7.21	Zone 7 Altamont	0				541			
		Check No. 2	5.21									
				Zone 7 Patterson Inflow Exchange	0							
4	6	Check No. 3	9.49	Zone 7 Patterson Project Water	541				35			
		Check No. 4	10.68									
		Check No. 5	12.29									
			13.55	Zone 7 Wente #1	35							
			14.16	Zone 7 Wente #2	0							
			14.31	Ising Project Water	8							
		Check No. 6	14.65									
			14.78	Zone 7 Arroyo Mocho Project Water	860							
		Check No. 7	16.38									
			16.57	Zone 7 Wente #3	0							
			16.69	Zone 7 Norman Nursery	0							
			16.70	Zone 7 Concannon Project Water	13							
5	8	Del Valle Branch Pipeline Junction	18.63	(Pumped into Lake Del Valle)	1,603				13			
				(Flow into South Bay Aqueduct)	1,226							
				Arroyo Valle #1 & #2 Project Water	0							
				Arroyo Valle #1 & #2 Inflow Released	245							
				Lake Del Valle Recreation	3							
				Zone 7 Wente #5	7							
			19.20	So. Livermore Project	1,278							
				So. Livermore Inflow Released	0							
				So. Livermore Stored Exchanged	0							
			19.21	Zone 7 - Kalthrof Detjens	14							
6		La Costa Tunnel	22.50	ACWD Vallecitos Project Water	274				7			
			25.97	City of San Francisco San Antonio	0							
7		Mission Tunnel	28.97	ACWD - Bayside 1 & 2 Project Water: Inflow Released	1,472				14			
				Inflow Exchange:	0							
8		Santa Clara Pipeline	35.86	S.C.V.W.D. Meter	6,358				2,983			

**Table 13. Lake Del Valle**

Daily Operation

Capacity: 77,106 ac-ft

**March 2004**

Date	Water Surface Elevation (feet)	Storage	Storage Change	Inflow		Outflow					Precipitation (inches)
				Natural 1/	From South Bay Aqueduct	Arroyo Valle	South Bay Aqueduct	Recreation Deliveries 2/	Evaporation	Total Outflow	
Feb 29	698.88	37,066									
1	699.20	37,282	216	219	0	0	0	0	3	3	0.10
2	699.42	37,432	150	153	0	0	0	0	3	3	0.06
3	699.59	37,547	115	118	0	0	0	0	3	3	0.01
4	699.74	37,650	103	107	0	0	0	0	4	4	0.04
5	699.85	37,725	75	79	0	0	0	0	4	4	0.00
6	699.96	37,793	68	72	0	0	0	0	4	4	0.00
7	700.04	37,855	62	67	0	0	0	0	5	5	0.00
8	700.12	37,909	54	60	0	0	0	0	6	6	0.00
9	700.19	37,957	48	54	0	0	0	0	6	6	0.00
10	700.25	37,999	42	48	0	0	0	0	6	6	0.00
11	700.30	38,033	34	41	0	0	0	0	7	7	0.00
12	700.35	38,067	34	40	0	0	0	0	6	6	0.00
13	700.37	38,081	14	42	0	0	18	0	10	28	0.00
14	700.33	38,053	-28	39	0	0	58	0	9	67	0.00
15	700.08	37,882	-171	35	0	0	199	0	7	206	0.00
16	699.80	37,691	-191	33	0	0	214	0	10	224	0.00
17	699.52	37,500	-191	23	0	0	204	0	10	214	0.00
18	699.24	37,309	-191	30	0	0	211	0	10	221	0.00
19	698.98	37,133	-176	23	0	0	189	0	10	199	0.00
20	698.87	37,059	-74	36	0	0	102	0	8	110	0.00
21	698.85	37,045	-14	25	0	0	32	0	7	39	0.00
22	698.88	37,066	21	25	0	0	0	0	4	4	0.00
23	698.88	37,066	0	5	0	0	0	0	5	5	0.00
24	699.04	37,177	111	22	94	0	0	0	5	5	0.00
25	699.34	37,377	200	14	190	0	0	0	4	4	0.00
26	699.69	37,616	239	24	219	0	0	0	4	4	0.26
27	700.04	37,855	239	22	221	0	0	0	4	4	0.01
28	700.38	38,088	233	17	221	0	0	0	5	5	0.00
29	700.70	38,308	220	6	220	0	0	1	5	6	0.00
30	701.06	38,557	249	37	220	0	0	1	7	8	0.00
31	701.37	38,772	215	0	219	0	0	1	3	4	0.00
Total				1,706	1,516	1,604	0	1,227	3	184	1,414
1/ Total inflow from stream gaging station above Lang Canyon and accretions/depletions.											
2/ To East Bay Regional Park District.											
NR=No Records											

**Table 14. Consolidated State-Federal O'Neill Forebay**

Daily Operations

**March 2004**

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity 56,430 ac-ft

Date	Water Surface Elevation (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)				Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
				Pump In 1/	O'Neill Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	California Aqueduct	O'Neill Pumping Generating Plant (Generation)	Gianelli Pumping Generating Plant (Pumped)	Dos Amigos Pumping Plant	Deliveries 2/	
Feb 29	221.78	47,809										
1	221.96	48,282	473	0	2,311	0	8,010	0	7,392	3,336	5	650.5
2	222.98	50,993	2,711	0	2,359	0	7,729	0	6,292	3,232	5	807.8
3	221.96	48,282	-2,711	0	2,433	0	5,831	0	6,983	3,522	6	880.2
4	222.32	49,235	953	0	2,469	0	7,386	0	6,074	3,663	1	363.5
5	222.70	50,246	1,011	0	2,541	0	7,529	0	5,533	3,941	1	-85.3
6	221.42	46,863	-3,383	0	2,787	0	6,944	0	7,202	4,674	1	440.4
7	220.20	43,671	-3,192	0	2,977	0	5,952	0	6,218	4,841	1	521.7
8	221.50	47,073	3,402	0	3,000	0	7,544	0	2,874	6,298	1	344.2
9	221.10	46,023	-1,050	0	2,868	0	7,285	0	3,830	7,068	6	221.6
10	220.02	43,204	-2,819	0	2,853	0	6,883	0	4,400	7,667	4	913.8
11	219.41	41,631	-1,573	0	2,815	0	7,008	0	3,075	7,925	4	388.0
12	220.68	44,923	3,292	0	2,834	2,380	6,963	0	2,201	8,844	4	531.7
13	220.56	44,609	-314	0	2,890	0	7,434	0	2,817	8,039	4	377.9
14	218.80	40,077	-4,532	0	2,812	0	7,063	0	3,774	8,620	4	238.2
15	220.03	43,230	3,153	0	2,695	0	7,550	0	1,480	7,355	4	183.4
16	218.82	40,128	-3,102	0	2,440	0	6,533	0	4,283	7,315	4	1,065.1
17	217.91	37,849	-2,279	0	1,801	0	5,589	0	1,502	7,343	20	326.0
18	219.22	41,145	3,296	0	1,307	1,590	6,459	0	0	7,714	20	39.4
19	219.38	41,554	409	0	1,133	972	6,001	0	0	7,893	20	13.4
20	220.36	44,088	2,534	0	1,502	2,120	5,939	0	0	8,153	20	-110.5
21	220.47	44,374	286	0	1,618	0	6,218	0	0	7,816	20	144.4
22	221.26	46,442	2,068	0	1,868	353	5,419	0	0	6,469	20	-108.4
23	221.16	46,180	-262	0	1,726	0	5,164	0	315	6,784	23	99.9
24	220.64	44,818	-1,362	0	1,868	1,944	4,951	0	1,851	7,770	23	194.3
25	221.93	48,203	3,385	0	2,319	2,642	5,873	0	1,177	7,924	23	-3.4
26	222.61	50,006	1,803	0	2,489	1,227	6,153	0	1,788	7,730	23	581.0
27	222.24	49,022	-984	0	2,658	0	6,189	0	3,366	6,194	23	239.9
28	221.90	48,124	-898	0	2,792	0	6,516	0	3,331	6,742	23	335.3
29	221.96	48,282	158	0	2,803	0	5,560	0	2,187	6,535	23	461.4
30	221.48	47,020	-1,262	0	2,676	0	4,687	0	2,880	5,383	23	286.8
31	221.07	45,944	-1,076	0	2,636	0	4,801	0	2,178	6,134	24	356.5
Total			-1,865	0	74,280	13,228	199,163	0	95,003	202,924	383	10,699
Mean cfs			---	0	2,396	427	6,425	0	3,065	6,546	12	345
Acre-feet			-1,865	0	147,335	26,236	395,039	0	188,440	402,496	759	21,220

1/ Pump-in located at Mile 79.67R.

2/ Includes 69 AF delivered to DFG at O'Neill Forebay, 4 AF to Parks & Recreation, 1 Af to P & R Cattle, and 685 AF to San Luis Water District. The daily values are averaged to include deliveries from March 4 through March 31.

**Table 15. Consolidated State-Federal San Luis Reservoir**

Daily Operations

March 2004

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 2,027,835 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)	Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)
				Gianelli Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	Pacheco Tunnel 1/	Parks and Rec. Del.	
Feb 29	531.09	1,878,476						
1	532.18	1,891,980	13,504	7,392	0	158	0	-426
2	533.02	1,902,409	10,429	6,292	0	153	0	-881
3	533.50	1,908,378	5,969	6,983	0	155	0	-3,819
4	534.44	1,920,085	11,707	6,074	0	128	0	-44
5	535.30	1,930,818	10,733	5,533	0	48	0	-74
6	536.43	1,944,952	14,134	7,202	0	36	0	-40
7	537.40	1,957,113	12,161	6,218	0	34	0	-53
8	537.84	1,962,638	5,525	2,874	0	36	0	-53
9	538.83	1,975,089	12,451	3,830	0	37	0	2,484
10	539.47	1,983,153	8,064	4,400	0	37	0	-297
11	539.88	1,988,325	5,172	3,075	0	38	0	-429
12	539.83	1,987,694	-631	2,201	2,380	38	0	-101
13	540.22	1,992,618	4,924	2,817	0	41	0	-294
14	540.76	1,999,442	6,824	3,774	0	43	0	-291
15	540.95	2,001,845	2,403	1,480	0	63	0	-206
16	541.55	2,009,440	7,595	4,283	0	137	0	-317
17	541.87	2,013,494	4,054	1,502	0	84	0	626
18	541.62	2,010,326	-3,168	0	1,590	136	0	129
19	541.44	2,008,047	-2,279	0	972	179	0	2
20	541.08	2,003,489	-4,558	0	2,120	159	0	-19
21	541.03	2,002,857	-632	0	0	161	0	-158
22	540.94	2,001,718	-1,139	0	353	170	0	-51
23	540.90	2,001,212	-506	315	0	166	0	-404
24	540.86	2,000,706	-506	1,851	1,944	166	0	4
25	540.58	1,997,166	-3,540	1,177	2,642	153	0	-167
26	540.59	1,997,293	127	1,788	1,227	103	0	-394
27	541.00	2,002,477	5,184	3,366	0	174	0	-578
28	541.46	2,008,300	5,823	3,331	0	158	0	-237
29	541.74	2,011,847	3,547	2,187	0	184	0	-215
30	542.10	2,016,411	4,564	2,880	0	149	0	-430
31	542.39	2,020,089	3,678	2,178	0	149	1	-174
Total		141,613		95,003	13,228	3,473	1	-6,907
Mean cfs		- - -		3,065	427	112	0	-223
Acre-feet		141,613		188,440	26,236	6,892	1	-13,698

1/ Pacheco Tunnel, San Felipe Split; Santa Clara: 5,518 AF, San Benito: 1,374 AF.

**Table 16. San Luis Field Division Plant Data**

(in acre-feet)

**March 2004**

Date	Dos Amigos Pumping Plant		Gianelli Pumping - Generating Plant				San Felipe Project
	Total Pumping	SWP Pumping 1/ 2/	Total Generation	SWP Generation 1/ 2/	Total Pumping	SWP Pumping 1/ 2/	Federal
1	6,616	5,359	0	0	14,662	12,371	314
2	6,411	5,138	0	0	12,481	8,399	304
3	6,986	5,730	0	0	13,851	9,544	308
4	7,265	5,997	0	0	12,048	8,592	254
5	7,817	6,569	0	0	10,974	5,211	96
6	9,270	8,015	0	0	14,286	9,517	71
7	9,602	8,343	0	0	12,333	3,537	67
8	12,492	11,223	0	0	5,701	2,088	71
9	14,020	12,771	0	0	7,597	2,593	73
10	15,207	13,971	0	0	8,727	4,092	73
11	15,720	14,489	0	0	6,100	478	76
12	17,542	16,304	4,721	4,721	4,366	-101	75
13	15,946	14,688	0	0	5,587	32	82
14	17,097	15,872	0	0	7,485	-16	86
15	14,589	13,362	0	0	2,936	-12	125
16	14,510	13,284	0	0	8,496	4,786	271
17	14,564	12,281	0	0	2,979	498	167
18	15,301	11,832	3,154	3,154	0	0	269
19	15,656	12,162	1,927	1,927	0	0	356
20	16,171	12,629	4,205	-65	0	0	315
21	15,503	11,979	0	0	0	0	320
22	12,831	9,289	701	701	0	0	337
23	13,456	8,321	0	0	625	625	329
24	15,411	9,355	3,855	272	3,672	3,672	329
25	15,717	9,556	5,240	-137	2,335	2,335	304
26	15,332	6,963	2,433	-117	3,546	3,546	205
27	12,285	4,604	0	0	6,676	6,676	345
28	13,372	5,762	0	0	6,607	6,607	313
29	12,963	7,044	0	0	4,337	4,337	365
30	10,677	6,008	0	0	5,712	5,712	296
31	12,167	7,643	0	0	4,321	2,732	296
Total	402,496	306,543	26,236	10,456	188,440	107,851	6,892

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping;  
adjustments to SWP water shares are made to balance the mismatch.

2/ Provisional, subject to change.

**Table 17. Consolidated State-Federal Los Banos Reservoir**

Daily Operations

March 2004

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

Capacity 34,560 ac-ft

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)
					Spill	Outlet	
Feb 29	327.87	20,608					
1	327.22	20,304	-304	47	0	200	-1
2	326.91	20,160	-144	60	0	133	1
3	326.92	20,165	5	40	0	37	-1
4	327.04	20,220	55	28	0	0	-1
5	327.13	20,262	42	21	0	0	1
6	327.21	20,300	38	19	0	0	0
7	327.29	20,337	37	19	0	0	-1
8	327.36	20,370	33	17	0	0	-1
9	327.43	20,402	32	16	0	0	0
10	327.48	20,426	24	12	0	0	0
11	327.52	20,444	18	9	0	0	0
12	327.56	20,463	19	10	0	0	-1
13	327.59	20,477	14	7	0	0	0
14	327.62	20,491	14	7	0	0	0
15	327.64	20,501	10	5	0	0	0
16	327.66	20,510	9	5	0	0	-1
17	327.69	20,524	14	7	0	0	0
18	327.71	20,533	9	5	0	0	-1
19	327.71	20,533	0	0	0	0	0
20	327.72	20,538	5	3	0	0	-1
21	327.73	20,543	5	3	0	0	-1
22	327.74	20,547	4	2	0	0	0
23	327.72	20,538	-9	0	0	0	-9
24	327.72	20,538	0	0	0	0	0
25	327.72	20,538	0	0	0	0	0
26	327.71	20,533	-5	0	0	0	-5
27	327.72	20,538	5	3	0	0	-1
28	327.73	20,543	5	3	0	0	-1
29	327.74	20,547	4	2	0	0	0
30	327.72	20,538	-9	0	0	0	-9
31	327.73	20,543	5	3	0	0	-1
<b>Total</b>			<b>-65</b>	<b>353</b>	<b>0</b>	<b>370</b>	<b>-34</b>
<b>Mean cfs</b>			---	11	0	12	---
<b>Acre-feet</b>			<b>-65</b>	<b>700</b>	<b>0</b>	<b>734</b>	<b>-34</b>

**Table 18. Consolidated State-Federal Little Panoche Reservoir**

Daily Operations

March 2004

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 5,580 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft) 1/	Storage Change (ac-ft) 1/	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft) 1/
					Spill	Outlet	
Feb 29	602.60	826					
1	602.60	826	0	1	0	1	
2	602.60	826	0	1	0	1	
3	602.60	826	0	1	0	1	
4	602.60	826	0	1	0	1	
5	602.60	826	0	1	0	1	
6	602.60	826	0	1	0	1	
7	602.60	826	0	1	0	1	
8	602.60	826	0	1	0	1	
9	Not Observed			1	0	1	
10	602.60	826	0	1	0	1	
11	602.60	826	0	1	0	1	
12	602.60	826	0	1	0	1	
13	602.60	826	0	1	0	1	
14	602.60	826	0	1	0	1	
15	602.60	826	0	1	0	1	
16	602.60	826	0	1	0	1	
17	602.60	826	0	1	0	1	
18	Not Observed			1	0	1	
19	602.60	826	0	1	0	1	
20	602.60	826	0	1	0	1	
21	602.60	826	0	1	0	1	
22	602.60	826	0	1	0	1	
23	602.60	826	0	1	0	1	
24	602.60	826	0	1	0	1	
25	602.60	826	0	1	0	1	
26	602.60	826	0	1	0	1	
27	Not Observed			1	0	1	
28	602.60	826	0	1	0	1	
29	602.60	826	0	1	0	1	
30	Not Observed			1	0	1	
31	602.60	826	0	1	0	1	
Total			0	31	0	31	---
Mean cfs			---	1	0	1	---
Acre-feet			0	61	0	61	0

1/ Not available on a daily basis

**Table 19a. Governor Edmund G. Brown California Aqueduct**

San Luis Field Division, Monthly Deliveries

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries			
		Beginning and Ending				USBR	Transfer	DWR Recreation	USBR Recreation
	No.	Structure	Mile						
2B	12	Check No. 12	66.71		395,039				
3A		San Luis Reservoir		Department of Parks and Recreation	1	5,518		1	
				San Felipe Division Santa Clara Water District	5,518				
				San Felipe Division San Benito Water District	1,374				
3	13	O'Neill Forebay	70.85	Department of Parks and Recreation	4			2	2
				Cattle Program	1				
				Department of Fish & Game	69				
		70.91 Thru 85.08		San Luis Water District	685	685		38	31
				(Floodwater Inflow)	0				
				Reach 3 Subtotal:	759	685	0	41	33
		Dos Amigos Pumping Plant	86.73		402,496				
4	14		89.03			4,714			
			Thru 94.06	San Luis Water District	4,714				
			89.66				886		
			Thru 89.67	Pacheco Water District	886				
			89.68	Panoche Water District	35		35		
			89.70	City of Dos Palos	93				
	15	Check No. 14	95.06						
			98.15			547			
			Thru 104.20	San Luis Water District	547				
			96.15				3,498		
			Thru 102.64	Panoche Water District	3,498				
				(Floodwater Inflow)	0				
		102.64	Broadview Water District	0					
			105.22			9,090			
			Thru 108.64	Westlands Water District	9,090				
		Check No.15	108.50						
			San Felipe Division Total:	6,892	6,892	0	0	0	0
			Pacheco Water District Total:	886	886	0	0	0	0
			Broadview Water District Total:	0	0	0	0	0	0
			City of Dos Palos Total:	93	93	0	0	0	0
			SLWD Reach 4 Subtotal:	5,946	5,946	0	0	0	0
			Panoche Water District Total:	3,533	3,533	0	0	0	0
			SLWD Total:	5,946	5,946	0	0	0	0
			Westlands WD Reach 4 Subtotal:	9,090	9,090	0	0	0	0

**Table 19b. Governor Edmund G. Brown California Aqueduct**  
San Luis Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries							
	Beginning and Ending		Mile			USBR	Transfer	DWR Recreation	USBR Recreation				
	No.	Structure											
5	16		110.52	(Reverse flow, Kings River)	0	10,724		1					
			Thru	Westlands Water District	10,724								
			122.05	Department of Fish and Game	1								
		Check No. 16	122.07										
	17		124.18	Westlands Water District	12,099	12,099							
			Thru										
		Check No. 17	132.95										
	18		133.81	Westlands Water District	12,408	12,408							
			Thru										
			142.61										
		Pleasant Valley Pumping Plant	143.16	Westlands Water District	9,187								
			143.16	City of Coalinga	405								
		Check No. 18	143.23										
				Westlands WD Reach 5 Subtotal:	44,418	44,418	0	0	0				
6	19		145.26	Westlands Water District	16,202	16,202							
			Thru										
			151.19	Westlands Water District Lemoore Naval Air Station	147								
		Check No. 19	155.64										
				Westlands WD Reach 6 Subtotal:	16,202	16,202	0	0	0				
7	20		156.34	City of Huron	69	69							
			156.40	Westlands Water District	9,876								
			Thru										
			163.69										
		Check No. 20	164.69										
	21		164.79	City of Avenal	204	204							
			167.04	Westlands Water District	3,277								
			Thru										
			171.67										
		Check No. 21	172.40		316,391								
				Reach 7 Total:	13,426	13,426	0	0	0				
				Westlands WD Total:	83,010	82,863	147	0	0				
				City of Coalinga Total:	405	405	0	0	0				
				City of Huron Total:	69	69	0	0	0				
				City of Avenal Total:	204	204	0	0	0				
Total San Luis Field Division Deliveries:					101,114	100,891	147	43	33				

1/ County of Kings transferred 147 AF of Table A water to Westlands Water District

**Table 20. Consolidated State-Federal San Luis Canal 1/**

Daily Operations

March 2004

United States  
Department of the Interior  
Bureau of Reclamation  
Central Valley Project

State of California  
The Resources Agency  
Department of Water Resources  
State Water Project

Date	Storage In Canal (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
			Non- Project	Dos Amigos Pumping Plant	Pools 14 & 15 2/	Pool 15	Pools 15 thru 21 3/	Flow Past Check 21	
Feb 29	29,043								
1	28,831	-212	0	3,336	57	34	456	3,087	191
2	28,821	-10	0	3,232	57	34	456	2,816	126
3	28,606	-215	0	3,522	57	38	457	3,119	41
4	28,442	-164	0	3,663	51	34	750	3,202	291
5	28,477	35	0	3,941	51	34	750	3,175	87
6	28,581	104	0	4,674	51	34	750	3,823	36
7	28,952	371	0	4,841	51	34	750	3,916	97
8	28,976	24	0	6,298	51	34	750	5,480	29
9	28,317	-659	0	7,068	51	34	750	6,665	100
10	28,538	221	0	7,667	51	37	750	6,619	-99
11	28,334	-204	0	7,925	92	58	1,426	6,867	415
12	28,828	494	0	8,844	92	58	1,426	7,202	183
13	28,063	-765	0	8,039	92	58	1,426	6,931	82
14	28,566	503	0	8,620	92	58	1,426	6,886	96
15	28,965	399	0	7,355	92	58	1,426	5,591	13
16	28,480	-485	0	7,315	92	58	1,426	5,798	-186
17	27,597	-883	0	7,343	92	58	1,426	5,794	-418
18	28,460	863	0	7,714	133	84	2,033	5,146	117
19	28,105	-355	0	7,893	133	84	2,033	6,002	180
20	29,469	1,364	0	8,153	133	84	2,033	5,337	122
21	28,854	-615	0	7,816	133	84	2,033	6,399	523
22	28,573	-281	0	6,469	133	84	2,033	4,784	423
23	28,286	-287	0	6,784	133	84	2,033	4,928	249
24	28,932	646	0	7,770	133	87	2,033	5,534	343
25	29,409	477	0	7,924	149	62	1,623	5,826	-24
26	29,654	245	0	7,730	149	62	1,623	5,475	-297
27	29,176	-478	0	6,194	149	62	1,623	4,648	47
28	29,088	-88	0	6,742	149	62	1,623	5,216	264
29	29,591	503	0	6,535	149	62	1,623	4,620	173
30	28,544	-1,047	0	5,383	149	62	1,623	4,394	317
31	28,997	453	0	6,134	149	65	1,623	4,230	161
Total		-46	0	202,924	3,146	1,781	42,193	159,510	3,682
Mean cfs		---	0	6,546	101	57	1,361	5,145	119
Acre-feet		-46	0	402,496	6,240	3,533	83,689	316,391	7,311

1/ San Luis Canal includes Pools 14 through 21 of the California Aqueduct.

2/ Includes 885 AF AG & 1 AF M&I to Pacheco W.D., 93 AF to the City of Dos Palos, and 5,261 AF to San Luis Water District.

3/ Includes 69 AF to the City of Huron, 204 AF to the City of Avenal, 405 AF to the City of Coalinga, 147 AF to Lemoore Naval Air Station @ 30L, 1 AF to F&G @ WWD Lateral 4L, and 82,863 to WWD.

**Table 21. San Joaquin Field Division Plant Data**

(in acre-feet)

**March 2004**

Date	Coastal Aqueduct					California Aqueduct			
	Las Perillas Pumping Plant	Badger Hill Pumping Plant	Devil's Den Pumping Plant	Bluestone Pumping Plant	Polonio Pass Pumping Plant	Buena Vista Pumping Plant	Teerink Pumping Plant	Chrisman Pumping Plant	Edmonston Pumping Plant
1	47	47	43	38	45	3,656	3,621	3,277	3,484
2	48	48	47	44	50	3,966	4,037	3,957	3,894
3	46	46	39	35	39	4,253	4,312	4,176	4,055
4	82	82	50	47	52	4,715	4,594	4,535	4,556
5	101	101	49	46	52	4,825	4,839	4,760	4,754
6	104	104	42	40	45	4,880	4,970	4,728	4,637
7	73	73	46	43	46	5,117	5,141	5,026	4,916
8	266	266	28	25	30	4,423	4,552	4,372	4,277
9	367	367	52	49	55	4,837	4,705	4,573	4,436
10	385	385	51	48	52	4,280	4,237	4,077	3,942
11	370	370	52	50	56	5,059	4,910	4,765	4,606
12	377	377	54	50	56	5,428	5,212	5,015	4,808
13	621	621	60	57	64	5,007	5,084	4,878	4,795
14	491	491	80	73	83	5,567	5,258	5,101	4,889
15	316	316	44	40	47	5,511	5,691	5,468	5,334
16	368	368	69	64	71	5,826	5,579	5,342	5,179
17	338	338	53	50	55	5,240	4,912	4,625	4,516
18	343	343	59	55	63	5,631	5,505	5,285	5,210
19	358	358	64	66	72	5,523	4,652	4,914	4,673
20	539	539	65	63	66	5,345	5,746	5,206	5,012
21	338	338	63	59	66	5,621	5,520	5,327	5,207
22	259	259	51	47	53	6,085	5,924	5,678	5,553
23	325	325	52	48	54	5,605	5,508	5,246	5,098
24	313	313	52	48	54	5,739	5,667	5,355	5,170
25	388	388	78	73	79	6,733	6,574	6,391	6,279
26	399	399	65	60	65	6,474	6,637	6,449	6,335
27	355	355	54	51	57	5,809	5,716	5,511	5,456
28	298	298	60	55	62	6,064	6,013	5,850	5,643
29	214	214	54	49	55	5,807	5,766	5,463	5,423
30	252	252	58	54	61	5,813	5,739	5,462	5,307
31	238	238	55	52	59	6,249	6,167	5,813	5,850
Total	9,019	9,019	1,689	1,579	1,764	165,088	162,788	156,625	153,294

**Table 22a. Governor Edmund G. Brown California Aqueduct**  
San Joaquin Field Division, Monthly Deliveries

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	USBR	Art. 21 Table A Carryover	Extended Table A Carryover	CVC		
	No.	Structure	Mile									
7	21	Check No. 21	172.40		316,391							
8C	22			Empire West Side Irrig. Dist. TL - A	1,081	282	626	173				
				172.66 County of Kings TL - A	3,157							
				TLBWSD TL-A	5,097							
				175.18 DRWD - 1	1,166							
				177.54 DRWD - 1B	229							
				180.64 TLBWSD - C	0							
				180.65 DRWD - 1A	534							
				182.99 DRWD - 2	4,331							
				183.00 Tulare Lake Basin WSD TL - B	17,968							
				184.00 DRWD - Paramount	2							
31A				184.63 Coastal Branch	9,019							
8D				Dudley Ridge Water Dist. DRWD - 3	679	118	561					
				Dudley Ridge Reach 8D Total:	6,941							
				Reach 8D CVC Total :	7,766							
				Tulare Lake Basin WSD Total:	15,299							
				Check No. 22	184.82							
9	23			189.69 Kern County Water Agency Lost Hills Water Dist. - 1	2,633		2,633					
				191.18 Kern County Water Agency Lost Hills Water Dist. - 2	505							
				194.22 Kern County Water Agency Lost Hills Water Dist. - 3	63							
				196.40 Kern County Water Agency Berrenda Mesa - 2	0							
				196.75 Kern County Water Agency Lost Hills Water Dist. - 4	837							
				K.C.W.A. Reach 9 Subtotal:	4,038							
				Check No. 23	197.05							
				201.24 Kern County Water Agency Lost Hills Water Dist. - 7	271	18	253					
				202.05 Kern County Water Agency Lost Hills Water Dist. - 5	677							
				204.69 Kern County Water Agency Lost Hills Water Dist. - 6	0							
				205.26 Kern County Water Agency Lost Hills Water Dist. - 8	2							
10A	24			Check No. 24	207.94		397					
				209.71 Kern County Water Agency Belridge Water Storage Dist. - 1A	1,514							
				209.78 Kern National Wildlife Refuge USBR BV-1B	970							
				209.80 Kern County Water Agency Buena Vista WSD 1B	24							
				KCWA Semitropic WSD	24,479	1,514	13,760	4,715	3/ 465			
				KCWA Semitropic WSD Penstocks	8,188							
				USBR Total:	970							
				Reach 10A CVC Total :	8,509							
				K.C.W.A. Reach 10A Subtotal:	26,646	7,521	14,410	4,715	4/ 8,044			

1/ County of Kings sent an additional 147 AF to Westlands Water District

2/ Lower Tule River ID water delivered to the Tulare Lake Basin WSD area.

3/ CVP water delivered through KCWA turnout into Rag Gulch area.

4/ CVP water delivered through KCWA turnout. Includes 3,789 AF into Rag Gulch area and 4,255 AF into Kern-Tulare area.

**Table 22b. Governor Edmund G. Brown California Aqueduct**  
San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	DRWD Art. 21	Art. 21 Table A Carryover	Extended Table A Carryover	CVC		
	No.	Structure	Mile									
11B	25	Kern County Water Agency Belridge - 2	210.75	Kern County Water Agency Belridge - 2	0	755	7,200	7,200				
			214.11	Kern County Water Agency Belridge - 3	0							
			216.62	Kern County Water Agency Belridge - 4	0							
			217.13	Kern County Water Agency Belridge - 5	7,955							
				Kern County Water Agency Belridge - 5D	110							
		Check No. 25	217.79									
				K.C.W.A. Reach 11B Subtotal:	8,065	865	0	7,200	0	0		
12D	26	Kern County Water Agency Belridge - 6	219.58	Kern County Water Agency Belridge - 6	0	372						
				Kern County Water Agency West Kern - 3	372							
		Check No. 26	224.92									
12E	27	Kern County Water Agency Buena Vista - 6	230.37	Kern County Water Agency Buena Vista - 6	188	1,564	188	1,965	27,643			
			231.73									
	28	Kern County Water Agency Buena Vista - 2	235.75	Kern County Water Agency Buena Vista - 2	1,965							
				Kern County WA CVC	29,207							
				DRWD CVC	0							
				Tulare Co.	0							
			238.04	Lower Tule River	0							
				Fresno Co.	0							
				Pixley ID	0							
				Hacienda								
		Check No. 28	238.11	DWR Wells	0							
				1/ Arvin Edison Total:	0	0	0	0	0	0		
				Reach 12E Subtotal:	31,360	1,564	0	29,796	0	0		
13B	29	Kern Water Bank Inflow	238.19	Kern Water Bank Inflow	0	3,868	2/ 1,657	11,763	417			
				Kern Water Bank Outflow	17,288							
			241.02	Kern River Intertie (inflow)	0							
			242.85	KCWA Buena Vista WSD - 7	0							
				KCWA Buena Vista WSD - 5	417							
			243.09	Kern County Water Agency Buena Vista - 3	3,058							
		Check No. 29	244.54	Buena Vista WSD	0							
	30	Kern County Water Agency Buena Vista - 4	249.85	Kern County Water Agency Buena Vista - 4	378							
			250.99		165,088							
				K.C.W.A. Reach 13B Subtotal:	21,141	3,939	1,657	15,545	0	0		
14A	31	Kern County Water Agency West Kern - 2	254.47	Kern County Water Agency West Kern - 2	0							
			256.11	Kern County Water Agency Wheeler Ridge-Maricopa - 2	31							

1/ Arvin Edison Contractors include Rag Gulch WD, Kern-Tulare WD, Fresno County, Hills Valley ID, Tri Valley WD, Tulare County, Lower Tule River ID, and Pixley ID.

2/ Dudley Ridge WD Article 21 water delivered to Kern Water Bank for storage.

**Table 22c. Governor Edmund G. Brown California Aqueduct**  
 San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending		Mile			Table A Amount	DRWD Art. 21	Art. 21 Table A Carryover	Extended Table A Carryover	CVC		
	No.	Structure										
14A	31	Check No. 31	256.14			KCWA Reach 14A Subtotal:	0	0	1,249	0		
	32		258.61		Kern County Water Agency Wheeler Ridge-Maricopa - 3	279			279			
			260.44		Kern County Water Agency Wheeler Ridge-Maricopa - 4	939			939			
		Check No. 32	261.72									
		1,249										
14B	33		264.42		Kern County Water Agency Wheeler Ridge-Maricopa - 5	2,496		2,496				
			266.91		Kern County Water Agency Wheeler Ridge-Maricopa - 6	298			298			
			267.36									
	34		270.24		Kern County Water Agency Wheeler Ridge-Maricopa - 7	2,109		2,109				
			271.27									
			Reach 14B Total:		4,903	0	0	0				
14C	35		272.39		Kern County Water Agency Wheeler Ridge-Maricopa - 8	933		933				
			276.09		Kern County Water Agency Wheeler Ridge-Maricopa - 9	948			948			
			277.30		Kern County Water Agency Arvin-Edison WSD	113			113			
			Reach 14C Total:		1,994	0	0	0				
		Teerink Pumping Plant	278.13		162,788							
15A	36		279.02		Kern County Water Agency Wheeler Ridge-Maricopa - 9A	308		308				
			280.06		Kern County Water Agency Wheeler Ridge-Maricopa - 10	2,410			1,302			
			Reach 15-A Total:		2,718	1,108	0	1,610				
16A	37	Chrisman Pumping Plant	280.36		156,625		15					
			282.06		Kern County Water Agency Wheeler Ridge-Maricopa - 11					0		
			283.95									
	38		285.01		Kern County Water Agency Wheeler Ridge-Maricopa - 12	15		15				
			286.39		Kern County Water Agency Wheeler Ridge-Maricopa - 13A	144						
			287.06		Kern County Water Agency Wheeler Ridge-Maricopa - 13	0						
	39		287.62		Kern County Water Agency Wheeler Ridge-Maricopa - 13B	391		391				
			290.21									
17E	40		291.26		Kern County Water Agency Wheeler Ridge-Maricopa - 14	793		793				
			293.07		Kern County Water Agency Wheeler Ridge-Maricopa - 15	68						
			Tehachapi Cummings CWD		768	68	768	0				
			K.C.W.A. Reach 16A Subtotal:		2,179	1,411	0	0				
	Edmonston Pumping Plant	293.45	153,294									

**Table 23. Governor Edmund G. Brown California Aqueduct**

San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Table A Amount	DRWD Art. 21	Art. 21 Table A Carryover	Extended Table A Carryover	CVC		
	No.	Structure	Mile									
31A	C-1	Coastal Branch Control	0.02		9,019	588	1,618	108	4,892			
		Las Perillas Pumping Plant	1.16		9,019							
	C-2		3.79	Green Valley Water District	0							
		Badger Hill Pumping Plant	4.27		9,019							
	C-3	Coastal Check No. 3	7.21									
	C-4		9.34	Castaic Lake WA (Devil's Den WD #1)	0							
		Coastal Check No. 4	9.34									
	C-5	Coastal Check No. 5	12.20									
	C-6		13.30	Kern County Water Agency Berrenda Mesa - 3	696							
			14.83	Kern County Water Agency Berrenda Mesa - 1	4,892							
				Kern County Water Agency Berrenda Mesa - PO	0							
		Devil's Den Pumping Plant	14.86		1,689							
				K.C.W.A. Reach 31A Subtotal:	5,588	588	0	5,000	0	0		
				Total CVC to KCWA turnouts :	16,275	0	0	0	0	16,275		
				K.C.W.A. Total:	110,253	17,368	1,657	86,513	4,715	0		
33A	C-7	Bluestone Pumping Plant	19.05		1,579	1,438	69	0	0			
	C-8	Polonio Pass Pumping Plant	26.54		1,764							
	C-9	Tank Site 1	27.81	(CCWA) Polonio Pass Treatment Plant								
	C-10	Shandon T.O.	38.23	Santa Barbara County (CCWA)	1,438							
		Tank Site 2	58.63	Central Coast:	0							
34	C-11	Chorro Valley T.O.	69.31	San Luis Obispo County (CCWA)	362	293	69	0	0			
		Energy Dissipater	78.12									
	Lopez T.O.		85.86	SLOCFC & WCD	0							
35	C-12			CCWA Total:	1,731	1,731	0	0	0	0		
		Guadalupe T.O.	102.70	SBCFC & WCD	0							
		Santa Maria T.O.	107.43	SBCFC & WCD	0							
		So. Cal. Water T.O.	109.20	SBCFC & WCD	0							
38				SBCFC & WCD Total:	0	0	0	0	0	0		
		Tank Site 5	115.42									

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2004**

Date	West Branch					East Branch											
	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant		Alamo Powerplant			Pearblossom Pumping Plant	Mojave Siphon Powerplant			Devil Canyon Powerplant Generation	Cherry Valley	Green Spot	Crafton Hills	
		Generation	Leakage	Generation 1/	Pumpback 1/	Generation	Bypass Through Plant	Cottonwood Chute		Generation	Leakage	Bypass Flume					
28	1	1,476	1,687	0	2,349	0	2,027	0	0	1,994	1,919	0	0	2,108	8	22	15
	2	1,732	1,867	0	2,162	0	2,198	0	0	1,986	1,947	0	0	1,782	0	0	0
	3	1,737	1,668	0	2,363	0	2,311	0	69	1,962	2,089	0	0	1,969	0	0	0
	4	1,769	1,810	0	1,763	0	2,435	0	292	2,916	2,818	0	0	2,780	8	19	13
	5	1,808	1,667	0	2,182	0	2,655	0	305	2,752	2,814	0	0	2,558	0	18	16
	6	1,785	1,754	0	157	0	2,858	0	32	2,606	2,733	0	0	2,720	0	0	0
	7	1,724	1,429	0	242	0	3,224	0	0	3,067	3,143	0	0	2,848	0	0	0
	8	1,724	1,849	0	2,937	0	2,579	0	0	2,258	2,411	0	0	2,880	0	23	22
	9	1,719	1,556	0	2,331	0	2,780	0	0	2,531	2,556	0	0	2,955	0	15	12
	10	1,645	1,722	0	2,324	684	2,097	0	201	2,070	1,916	0	0	2,803	0	0	0
	11	1,756	1,867	0	1,512	925	2,713	0	153	2,553	2,692	0	0	3,057	0	0	0
	12	1,868	1,772	0	2,641	0	2,835	0	139	2,741	2,747	0	0	2,715	0	0	0
	13	1,775	1,834	0	3,135	1,335	2,837	0	216	2,907	2,897	0	0	2,981	0	0	0
	14	1,724	1,681	0	383	943	3,220	0	0	2,878	2,857	0	0	2,726	0	0	0
	15	2,192	2,115	0	3,046	754	3,028	0	136	2,869	2,967	0	0	3,039	0	0	0
	16	2,117	2,205	0	2,656	0	3,030	0	30	2,910	2,882	0	0	2,682	0	0	0
	17	1,592	2,040	0	2,747	545	2,833	0	123	2,929	2,925	0	0	2,728	0	0	0
	18	2,112	2,432	0	4,061	1,440	2,986	0	112	2,695	2,690	0	0	2,682	0	0	0
	19	2,065	1,393	0	3,798	0	2,493	0	107	2,544	2,833	0	0	2,942	0	0	0
	20	2,054	2,084	0	3,580	996	3,031	0	0	2,650	2,614	0	0	2,627	0	0	0
	21	2,360	2,196	0	1,229	1,790	2,843	0	0	2,547	2,627	0	0	2,872	0	0	0
	22	2,488	2,508	0	6,024	1,689	2,760	0	202	2,799	2,946	0	0	2,861	0	0	0
	23	2,272	2,567	0	4,124	711	2,604	0	154	2,507	2,346	0	0	3,301	0	0	0
	24	2,491	2,590	0	5,461	2,084	2,402	0	222	2,795	2,707	0	0	3,356	0	0	0
	25	2,501	2,488	0	5,463	2,776	3,214	0	412	3,410	3,333	0	0	3,096	0	0	0
	26	2,545	2,351	0	5,121	1,240	3,326	0	355	3,457	3,620	0	0	2,695	0	0	0
	27	2,333	2,430	0	1,947	2,102	2,771	0	164	2,908	2,859	0	0	2,689	0	0	0
	28	2,559	2,566	0	1,248	2,673	3,059	0	0	2,832	2,981	0	0	2,589	0	0	0
	29	2,472	2,515	0	4,514	2,359	2,663	0	224	2,700	2,928	0	0	2,704	0	1	0
	30	2,478	2,534	0	3,979	931	2,694	0	145	2,552	2,477	0	0	2,631	0	0	0
	31	2,466	2,596	0	4,187	2,432	3,198	0	126	3,251	3,256	0	0	2,963	0	1	0
Total		63,339	63,773	0	89,666	28,409	85,704	0	3,919	83,576	84,530	0	0	85,339	16	99	78

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**March 2004**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)	
				Project		Natural	Project		Natural			
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Feb 29	2574.71	165,688										
1	2574.25	165,105	-583	0	1,687	87	2,349	0	79	0	71	
2	2574.00	164,788	-317	0	1,867	88	2,162	0	119	0	9	
3	2573.57	164,245	-543	0	1,668	62	2,363	0	89	0	179	
4	2573.49	164,144	-101	0	1,810	48	1,763	0	69	0	-127	
5	2573.02	163,551	-593	0	1,667	43	2,182	0	50	0	-71	
6	2574.27	165,130	1,579	0	1,754	39	157	0	51	0	-6	
7	2575.18	166,286	1,156	0	1,429	36	242	0	51	0	-16	
8	2574.27	165,130	-1,156	0	1,849	36	2,937	0	40	0	-64	
9	2573.64	164,333	-797	0	1,556	36	2,331	0	40	0	-18	
10	2573.71	164,422	89	684	1,722	38	2,324	0	40	0	9	
11	2574.66	165,625	1,203	925	1,867	36	1,512	0	40	0	-73	
12	2573.97	164,750	-875	0	1,772	36	2,641	0	40	0	-2	
13	2573.97	164,750	0	1,335	1,834	36	3,135	0	40	0	-30	
14	2575.69	166,936	2,186	943	1,681	34	383	0	40	0	-49	
15	2575.53	166,732	-204	754	2,115	32	3,046	0	40	0	-19	
16	2575.09	166,171	-561	0	2,205	29	2,656	0	40	0	-99	
17	2574.87	165,892	-279	545	2,040	29	2,747	0	40	0	-106	
18	2574.68	165,650	-242	1,440	2,432	28	4,061	0	40	0	-41	
19	2572.79	163,262	-2,388	0	1,393	28	3,798	0	40	0	29	
20	2572.26	162,596	-666	996	2,084	28	3,580	0	40	0	-154	
21	2574.31	165,181	2,585	1,790	2,196	27	1,229	0	40	0	-159	
22	2572.78	163,249	-1,932	1,689	2,508	27	6,024	0	40	0	-92	
23	2572.05	162,333	-916	711	2,567	27	4,124	0	40	0	-57	
24	2571.36	161,470	-863	2,084	2,590	27	5,461	0	40	0	-63	
25	2571.13	161,183	-287	2,776	2,488	27	5,463	0	40	0	-75	
26	2569.89	159,642	-1,541	1,240	2,351	27	5,121	0	42	0	4	
27	2571.85	162,083	2,441	2,102	2,430	27	1,947	0	44	0	-127	
28	2574.95	165,993	3,910	2,673	2,566	27	1,248	0	44	0	-64	
29	2575.15	166,248	255	2,359	2,515	25	4,514	0	46	0	-84	
30	2574.69	165,663	-585	931	2,534	25	3,979	0	48	0	-48	
31	2575.28	166,413	750	2,432	2,596	24	4,187	0	51	0	-64	
Total				725	28,409	63,773	1,119	89,666	0	1,503	0	-1,407

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)	
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake			
				Natural	Project 1/					
Feb 29	1516.33	21,704								
1	1513.30	20,476	-1,228	2,349	24	0	24	3,567	-10	
2	1512.70	20,238	-238	2,162	31	0	31	2,391	-9	
3	1512.60	20,199	-39	2,363	31	0	31	2,392	-10	
4	1512.71	20,242	43	1,763	25	0	25	1,709	-11	
5	1512.73	20,250	8	2,182	20	0	20	2,164	-10	
6	1511.45	19,746	-504	157	17	0	17	656	-5	
7	1511.74	19,860	114	242	15	0	15	124	-4	
8	1518.85	22,753	2,893	2,937	14	0	14	0	-44	
9	1514.39	20,913	-1,840	2,331	12	0	12	4,151	-20	
10	1514.14	20,813	-100	2,324	11	684	11	1,735	-5	
11	1515.48	21,356	543	1,512	10	925	10	0	-44	
12	1513.34	20,492	-864	2,641	9	0	9	3,490	-15	
13	1512.98	20,349	-143	3,135	8	1,335	8	1,940	-3	
14	1510.09	19,219	-1,130	383	7	943	7	565	-5	
15	1515.79	21,482	2,263	3,046	6	754	6	0	-29	
16	1514.32	20,885	-597	2,656	6	0	6	3,247	-6	
17	1514.12	20,805	-80	2,747	6	545	6	2,282	0	
18	1512.98	20,349	-456	4,061	5	1,440	5	3,075	-2	
19	1512.70	20,238	-111	3,798	5	0	5	3,909	0	
20	1513.73	20,648	410	3,580	3	996	3	2,172	-2	
21	1512.47	20,147	-501	1,229	3	1,790	3	0	60	
22	1522.62	24,369	4,222	6,024	3	1,689	3	0	-113	
23	1522.59	24,356	-13	4,124	2	711	2	3,418	-8	
24	1522.43	24,287	-69	5,461	2	2,084	2	3,445	-1	
25	1520.70	23,540	-747	5,463	2	2,776	2	3,431	-3	
26	1523.01	24,540	1,000	5,121	2	1,240	2	2,880	-1	
27	1513.81	20,680	-3,860	1,947	2	2,102	2	3,703	-2	
28	1509.80	19,107	-1,573	1,248	2	2,673	2	146	-2	
29	1515.20	21,242	2,135	4,514	2	2,359	2	0	-20	
30	1514.45	20,938	-304	3,979	2	931	2	3,349	-3	
31	1511.76	19,868	-1,070	4,187	1	2,432	1	2,823	-2	
Total			-1,836	89,666	288	28,409	288	62,764	-329	

1/ Values supplied by LADWP, not verified by DWR.

**Table 27. Castaic Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 323,699 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow		Computed Losses (-) And Gains (+)	
				From Elderberry Forebay /1		Natural	Deliveries	Released To Castaic Lagoon		
				Natural	Project					
Feb 29	1509.54	311,630								
1	1510.59	313,930	2,300	24	3,567	19	1,280	50	20	
2	1511.13	315,117	1,187	31	2,391	29	1,125	50	-89	
3	1511.55	316,042	925	31	2,392	26	1,464	50	-10	
4	1511.64	316,240	198	25	1,709	22	1,395	50	-113	
5	1511.91	316,836	596	20	2,164	19	1,415	159	-33	
6	1511.52	315,975	-861	17	656	16	1,484	159	93	
7	1510.83	314,457	-1,518	15	124	14	1,561	155	45	
8	1509.98	312,593	-1,864	14	0	13	1,876	153	138	
9	1510.91	314,633	2,040	12	4,151	11	2,007	24	-103	
10	1510.85	314,501	-132	11	1,735	10	1,958	24	94	
11	1509.97	312,571	-1,930	10	0	8	2,009	16	77	
12	1510.57	313,886	1,315	9	3,490	8	2,044	13	-135	
13	1510.51	313,754	-132	8	1,940	7	2,083	13	9	
14	1509.80	312,198	-1,556	7	565	7	2,037	13	-85	
15	1508.85	310,124	-2,074	6	0	6	2,095	14	23	
16	1509.36	311,237	1,113	6	3,247	6	2,161	10	25	
17	1509.43	311,390	153	6	2,282	6	2,125	10	-6	
18	1509.96	312,549	1,159	5	3,075	6	2,074	10	157	
19	1510.56	313,864	1,315	5	3,909	5	2,215	10	-379	
20	1510.80	314,391	527	3	2,172	4	2,153	10	511	
21	1509.80	312,198	-2,193	3	0	4	2,194	10	4	
22	1508.90	310,233	-1,965	3	0	4	2,230	10	268	
23	1509.37	311,258	1,025	2	3,418	4	2,247	10	-142	
24	1509.84	312,286	1,028	2	3,445	3	2,243	10	-169	
25	1510.30	313,294	1,008	2	3,431	3	2,327	7	-94	
26	1510.46	313,645	351	2	2,880	3	2,309	7	-218	
27	1511.03	314,897	1,252	2	3,703	3	2,385	7	-64	
28	1510.06	312,768	-2,129	2	146	3	2,395	7	122	
29	1508.95	310,342	-2,426	2	0	3	2,391	7	-33	
30	1509.31	311,127	785	1	3,349	3	2,419	6	-143	
31	1509.52	311,586	459	2	2,823	1	2,425	0	58	
<b>Total</b>				<b>-44</b>	<b>288</b>	<b>62,764</b>	<b>276</b>	<b>62,126</b>	<b>1,074</b>	<b>-172</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 28. Governor Edmund G. Brown California Aqueduct**  
 Southern Field Division, Monthly Deliveries (West Branch)

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
	Beginning and Ending		No.			Table A Amount	Rec.	Art. 21 Table A Carryover	Extended Table A Carryover	Flexible Storage W'drawal	
	No.	Structure	Mile								
29A	42	Oso Pumping Plant	1.49		63,339						
29F	W2	Quail Lake	5.02	Antelope Valley-East Kern Water Agency	Removed						
		Quail Lake Embankment	7.82	Antelope Valley-East Kern Water Agency	Stub						
		Warne Power Plant	14.07		63,773						
29H	W3	Pyramid Lake		Calif. State Park Pyramid Recreation	0						
			14.10	United Water Conservation Dist.	0						
		Pyramid Dam	17.10	Piru Creek Fish Enhancement	0						
		Castaic Power Plant	25.82	( 28,409 AF pumpback ) 2/	89,666						
29J	W4	Elderberry Forebay									
		Forebay Dam	28.12								
30 1/	W5	Castaic Lake		Calif. State Park Castaic Lake Recreation	34						
		Castaic Dam	31.47								
		Castaic Lake Outlet	31.55	MWD - 78"	13,426						
				MWD - 132"	45,402						
				Castaic Lake WA - T1	2,148						
				Castaic Lake WA	962						
				United Water Conservation Dist.	0						
				MWD - Ventura County FCD	154						
				LA Co. Parks & Recreation	0						
				Releases to Lagoon	1,074						
				Reach 30 Subtotal:	62,126	3,264	34	7,165	1,602	50,061	
	W6	Castaic Lagoon		Recreation to Lagoon	0						
		Castaic Lagoon Outlet	31.87		1,128						

1/ Reach 30 actually terminates at mile 31.50. It is shown here as including the outlet works at mile 31.55.

All deliveries from the outlet works and from the Lagoon are billed to Reach 30.

2/ Value supplied by LADWP, not verified by DWR.

**Table 29. Silverwood Lake**

Daily Operation

(in acre-feet except as noted)

Capacity: 74,970 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)	Las Flores Ranch Exchange 1/	
							Project	Del. To CLAWA	Rec.	San Bernardino Tunnel			
Feb 29	3350.60	70,742											
1	3350.40	70,554	-188	1,919	0	50	3	0	2,108	0	0	-46	
2	3350.75	70,884	330	1,947	0	215	3	0	1,782	0	1	-46	
3	3350.95	71,074	190	2,089	0	135	3	0	1,969	0	42	-20	
4	3351.10	71,216	142	2,818	0	82	3	0	2,780	0	81	106	
5	3351.30	71,406	190	2,814	0	54	4	0	2,558	0	0	-116	
6	3351.40	71,501	95	2,733	0	48	4	0	2,720	0	1	39	
7	3351.80	71,882	381	3,143	0	41	4	0	2,848	0	0	49	
8	3351.30	71,406	-476	2,411	0	37	4	0	2,880	0	1	-39	
9	3350.80	70,932	-474	2,556	0	33	4	0	2,955	0	0	-104	
10	3349.90	70,082	-850	1,916	0	29	4	0	2,803	0	42	54	
11	3349.40	69,613	-469	2,692	0	26	4	0	3,057	0	95	-31	
12	3349.50	69,707	94	2,747	0	23	4	0	2,715	0	95	138	
13	3349.33	69,547	-160	2,897	0	21	5	0	2,981	0	94	2	
14	3349.50	69,707	160	2,857	0	19	4	0	2,726	0	24	38	
15	3349.48	69,688	-19	2,967	0	17	5	0	3,039	0	0	41	
16	3349.70	69,894	206	2,882	0	15	5	0	2,682	0	1	-3	
17	3349.90	70,082	188	2,925	0	14	5	0	2,728	0	0	-18	
18	3350.10	70,271	189	2,690	0	12	5	0	2,682	0	1	175	
19	3349.90	70,082	-189	2,833	0	11	5	1	2,942	0	1	-84	
20	3350.00	70,176	94	2,614	0	10	5	1	2,627	0	0	103	
21	3349.70	69,894	-282	2,627	0	9	6	0	2,872	0	0	-40	
22	3349.90	70,082	188	2,946	0	8	6	0	2,861	0	0	101	
23	3348.70	68,958	-1,124	2,346	0	8	6	0	3,301	0	0	-171	
24	3348.00	68,307	-651	2,707	0	8	5	0	3,356	0	0	-5	
25	3348.30	68,586	279	3,333	0	7	6	0	3,096	0	0	41	
26	3349.40	69,613	1,027	3,620	0	8	5	0	2,695	0	0	99	
27	3349.50	69,707	94	2,859	0	7	6	0	2,689	0	0	-77	
28	3349.90	70,082	375	2,981	0	6	6	0	2,589	0	0	-17	
29	3350.20	70,365	283	2,928	0	7	6	0	2,704	0	0	58	
30	3350.00	70,176	-189	2,477	0	7	5	0	2,631	0	0	-37	
31	3350.30	70,459	283	3,256	0	6	5	0	2,963	0	0	-11	
Total				-283	84,530	0	973	145	2	85,339	0	479	179
												341	

1/ Project water delivered from Mojave Siphon in exchange for like amount of Natural Streamflow.

**Table 30. Lake Perris**

Daily Operation

(in acre-feet except as noted)

Capacity: 131,452 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow 1/	Outflow 2/	Computed Losses (-) Gains (+) 1/
Feb 29	1585.98	122,242				
1	1586.01	122,310	68		10	
2	1586.07	122,446	136		10	
3	1586.10	122,513	67		10	
4	1586.12	122,559	46		10	
5	1586.17	122,672	113		20	
6	1586.13	122,581	-91		9	
7	1586.14	122,604	23		10	
8	1586.16	122,649	45		10	
9	1586.22	122,785	136		10	
10	1586.13	122,581	-204		10	
11	1586.09	122,491	-90		9	
12	1586.06	122,423	-68		11	
13	1586.08	122,468	45		8	
14	1586.07	122,446	-22		10	
15	1586.09	122,491	45		10	
16	1586.06	122,423	-68		10	
17	1586.06	122,423	0		9	
18	1586.02	122,333	-90		10	
19	1586.01	122,310	-23		9	
20	1585.99	122,265	-45		9	
21	1586.03	122,355	90		10	
22	1586.04	122,378	23		9	
23	1586.02	122,333	-45		9	
24	1586.09	122,491	158		9	
25	1586.05	122,400	-91		10	
26	1586.06	122,423	23		28	
27	1586.01	122,310	-113		124	
28	1586.01	122,310	0		7	
29	1586.02	122,333	23		9	
30	1586.03	122,355	22		7	
31	1586.03	122,355	0		8	
<b>Total</b>			113	1,498	434	-951

1/ Readings are not taken on a daily basis. End of month only.

2/ Includes deliveries to MWD from Reach 28J and recreation water to California State Park at lake Perris.

**Table 31a. Governor Edmund G. Brown California Aqueduct**  
 Southern Field Division, Monthly Deliveries (East Branch)

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries							
	Beginning and Ending					Table A Amount	Rec.	Transfer	Extended Table A Carryover	Art. 12E Table A Carryover			
	No.	Structure	Mile										
17E	40	Edmonston Pumping Plant	293.45		153,294								
	41		298.65		Kern County Water Agency Tej.-Cas								
17F		Check No. 41	303.41										
18A	42	Check No. 42	304.99										
19	43	Alamo Powerplant	305.73	(Does not include 3,919 AF flow down Cottonwood Chute)	85,704					838			
			308.05	Antelope Valley-East Kern WA	0								
		Check No. 43	309.70										
	44		311.84	LADWP Connection	0								
			313.50	AVEK 245th Street West	0								
	Check No. 44		314.81										
	45		314.93	AVEK 235th Street West	0								
			315.57	AVEK 225th Street West	0								
		Check No. 45	319.74										
	46		323.19	Antelope Valley-East Kern WA Fairmont	838		81						
				Mojave Water Agency Fairmont	81								
		Check No. 46	323.84										
				Reach 19 Total:	919		81	0	0	838			
20A	47	Check No. 47	326.77							29			
	48		326.91	Antelope Valley-East Kern WA Willow Springs Siphon	29								
			329.65	Antelope Valley-East Kern WA 120th Street West	Removed								
		Check No. 48	330.82										
	49	Check No. 49	335.93										
	50		336.73	AVEK WA - Quartz Hill (Wheeled for Palmdale WD)	0					2,062			
				Antelope Valley-East Kern WA	2,062								
			339.68	Antelope Valley-East Kern WA	41								
20B	Check No. 50		341.51							41			
	51	Check No. 51	342.07										
	52		342.80	Antelope Valley-East Kern WA 30th Street West	Not in Use								
			343.50	Antelope Valley-East Kern WA Temporary 10 and 12	18								
		Check No. 52	343.74										
	53		346.98	PWD Palmdale	906					84			
				Antelope Valley-East Kern WA Acton Treatment Plant	84								
21	Check No. 53		348.17										
	54	Check No. 54	350.25										
	55	Check No. 55	352.70										
	56	Check No. 56	354.76										
			354.97	Littlerock Creek I.D.	0								
22A	57	Check No. 57	356.93							28			
	58		357.60	Antelope Valley-East Kern WA	28								
			357.72	Antelope Valley-East Kern WA 96th Street East	0								
			359.82	Antelope Valley-East Kern WA East Side Treatment Plant	356								

**Table 31b. Governor Edmund G. Brown California Aqueduct**  
 Southern Field Division, Monthly Deliveries (East Branch, Continued)

(In acre-feet)

**March 2004**

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries							
	Beginning and Ending					Table A Amount	Rec-creation	Art. 21 Table A Carryover	Extended Table A Carryover	Flexible Storage W'drawal	Local		
	No.	Structure	Mile										
22B	58	Pearblossom Pumping Plant	360.61		83,576	520	331	26	2	42,209	7,376		
	59	Check No. 59	366.09										
	60		366.50		Antelope Valley-East Kern WA 0								
		Check No. 60	373.94										
	61	Check No. 61	379.00										
	62	Check No. 62	384.26										
	63	Check No. 63	389.20		Mojave Water Agency Mojave River 520								
			394.60		Mojave Water Agency Temporary 0								
	64	Check No. 64	395.10										
	65	Check No. 65	400.32										
	66		401.10		Mojave Water Agency Morongo 24" and 42" 331								
					Mojave Water Agency Hesperia 0								
23		Check No. 66	403.41			341	119	26	2	42,209	7,376		
	67	Mojave Siphon	405.48		Las Flores Ranch								
		Mojave Siphon Powerplant	405.65										
24	67	Silverwood Lake	407.65		Crestline Lake Arrowhead Water Agency 145								
					Calif. State Park Silverwood Agency (Rec.) 2								
25		San Bernardino Tunnel Intake	407.70										
		Devil Canyon Powerplant	412.73										
26A	68	Devil Canyon Afterbay Control Structures	412.88		MWD-SC Rialto 42,209								
					Desert Water Agency (MWD Wheeling Exchange) 0								
					San Gabriel Valley Water District 0								
					Coachella Valley WD (MWD Wheeling Exchange) 0								
					San Bernardino Valley MWD 24" and 72" 0								
					San Bernardino Valley MWD 48" 0								
					MWD (SBVMWD Exchange) 7,376								
					San Gorgonio Pass Water Agency 0								
28G	69	Santa Ana Valley Pipeline	425.46										
28H			433.06		MWD-SC Box Springs 5,670								
			440.05		MWD-SC Perris Bypass Pipeline 28,747								
28J		Lake Perris	442.00		MWD-SC 18" 294								
			443.44		MWD-SC 54" 47								
					MWD-SC 78" 93								
					Calif. State Park Lake Perris Recreation 27								
					MWD Total: 145,566	2,302	0	91,601	1,602	50,061			

**Table 32. Water Quality At Selected SWP Locations**

March 2004

Constituent	Units	Thermalito Afterbay At Outlet	North Bay Aqueduct Barker Slough Pumping Plant	Banks Pumping Plant	Delta Mendota Canal At McCabe Rd.	California Aqueduct				Devil Canyon Afterbay Near San Bernardino
						O'Neill Forebay Outlet (Check 13)	Kettleman City (Check 21)	Near Hwy 119 (Check 29)	Tehachapi Afterbay (Check 41)	
Alkalinity	mg/l as CaCO <sub>3</sub>	41	NR	64	106	70	72	75	76	79
Antimony	mg/l	NR	NR	<0.001	<0.001	<0.001	<0.001	<0.001	NR	NR
Arsenic	mg/l	<0.001	NR	0.002	0.003	0.002	0.002	0.002	0.002	0.002
Beryllium	mg/l	NR	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron	mg/l	<0.1	NR	0.1	0.6	0.2	0.2	0.2	0.2	0.2
Bromide	mg/l	NR	NR	0.05	0.24	0.09	0.10	0.11	0.11	0.12
Calcium	mg/l	8	NR	16	38	20	22	25	24	22
Carbon - Dissolved Organic	mg/l as C	NR	NR	4	4	4	5	5	5	4
Carbon - Total Organic	mg/l as C	NR	NR	4	5	5	6	6	5	4
Chloride	mg/l	<1	NR	24	115	41	47	52	52	51
Chromium	mg/l	<0.001	NR	0.001	0.003	0.001	0.001	0.002	0.002	0.001
Copper	mg/l	<0.001	NR	0.002	0.002	0.003	0.003	0.003	0.003	0.002
Fluoride	mg/l	<0.1	NR	<0.1	0.1	0.1	0.1	<0.1	0.1	<0.1
Hardness	mg/l as CaCO <sub>3</sub>	36	NR	77	177	91	104	116	113	104
Iron	mg/l	0.005	NR	0.029	<0.005	0.016	0.029	0.029	0.010	0.028
Lead	mg/l	<0.001	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/l	4	NR	9	20	10	12	13	13	12
Manganese	mg/l	<0.005	NR	0.019	<0.005	0.008	<0.005	<0.005	<0.005	<0.005
Nitrate + Nitrite	mg/l as N	<0.01	NR	0.76	NR	NR	1.32	NR	1.64	0.96
Phosphorus-Ortho	mg/l as P	<0.01	NR	0.07	NR	NR	0.10	NR	0.12	0.06
Phosphorus-Total	mg/l	0.02	NR	0.12	NR	NR	0.16	NR	0.22	0.09
Selenium	mg/l	<0.001	NR	<0.001	0.002	0.001	0.001	0.001	0.001	0.001
Sodium	mg/l	3	NR	20	99	33	39	44	43	38
Specific Conductance	µS/cm	88	NR	265	827	376	408	456	448	415
Sulfate	mg/l	2	NR	24	131	44	49	59	58	41
Total Dissolved Solids	mg/l	60	NR	155	504	223	237	265	262.5	233
Turbidity	NTU	5	NR	13	20	14	18	18	36	4
Zinc	mg/l	<0.005	NR	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

mg/l milligrams per liter

µg/l micrograms per liter

µS/cm microSiemens per centimeter

NR - Not Reported

NTU - nephelometric turbidity units

**Table 33. Water Quality At Selected Delta Stations**

**March 2004**

Date	Tides (feet above mean sea level)		Flow In CFS			Electrical Conductivity in millisiemens/cm								Cl in mg/l	
			Net Delta Outflow Index		Rio Vista	Antioch	Chippis Island	Emmaton		Jersey Point		Clifton Court	Cache Slough	Delta Mendota Canal	Contra Costa Canal Intake
	(Antioch) Daily Mean		Mean Daily	Monthly Average											
	Hi	Half			md	md	md	md	14dm	md	14dm	md	md	md	md
1	3.38	1.87	152,011	152,011	144,691	0.16	0.00	0.12	0.16	0.16	0.20	0.40	1.69	0.50	42
2	3.55	1.85	143,311	147,661	137,696	0.17	0.00	0.12	0.15	0.15	0.20	0.39	1.69	0.50	47
3	3.31	1.67	139,200	144,841	134,556	0.16	0.00	0.13	0.15	0.16	0.19	0.40	1.68	0.47	50
4	3.46	1.67	129,351	140,968	126,509	0.16	0.00	0.13	0.14	0.15	0.18	0.40	1.69	0.50	55
5	3.29	1.49	124,886	137,752	122,455	0.16	0.00	0.13	0.13	0.15	0.18	0.43	1.67	0.57	60
6	3.09	1.27	115,196	133,993	112,978	0.16	0.00	0.14	0.13	0.15	0.17	0.45	1.65	0.61	60
7	2.89	1.15	103,913	129,696	102,312	0.16	0.00	0.14	0.13	0.16	0.17	0.44	1.71	0.62	62
8	2.78	1.17	89,922	124,724	88,869	0.16	0.00	0.15	0.13	0.16	0.17	0.43	1.68	0.63	67
9	3.00	1.27	76,998	119,421	76,110	0.17	0.00	0.15	0.13	0.16	0.16	0.41	1.66	0.63	71
10	3.22	1.22	66,410	114,120	65,680	0.17	0.00	0.16	0.14	0.16	0.16	0.45	1.65	0.57	71
11	3.29	1.22	59,545	109,159	58,697	0.17	0.00	0.16	0.14	0.16	0.16	0.41	1.64	0.58	67
12	3.45	1.33	55,252	104,666	55,057	0.17	0.00	0.17	0.14	0.16	0.16	0.39	1.67	0.55	61
13	3.43	1.43	51,514	100,578	51,605	0.17	0.00	0.18	0.14	0.16	0.16	0.41	1.68	0.53	53
14	3.25	1.39	47,655	96,797	47,714	0.17	0.00	0.18	0.15	0.17	0.16	0.42	1.58	0.48	49
15	3.12	1.31	40,419	93,039	41,675	0.17	0.00	0.19	0.15	0.17	0.16	0.36	1.60	0.49	52
16	3.12	1.27	37,704	89,580	37,908	0.18	0.00	0.19	0.16	0.17	0.16	0.28	1.72	0.48	51
17	3.25	1.33	34,202	86,323	34,780	0.18	0.00	0.19	0.16	0.18	0.16	0.28	1.75	0.51	44
18	3.34	1.43	31,068	83,253	32,234	0.19	0.14	0.19	0.17	0.18	0.16	0.32	1.69	0.52	40
19	3.30	1.44	28,708	80,382	29,825	0.18	0.15	0.19	0.17	0.18	0.17	0.29	1.70	0.55	35
20	2.98	1.28	27,380	77,732	27,947	0.19	0.15	0.19	0.17	0.18	0.17	0.34	1.69	0.56	34
21	3.01	1.44	26,207	75,279	26,806	0.18	0.16	0.20	0.18	0.18	0.17	0.33	1.70	0.48	31
22	3.17	1.49	25,180	73,001	26,048	0.20	0.16	0.20	0.18	0.19	0.17	0.40	1.72	0.45	29
23	3.26	1.42	24,410	70,889	25,349	0.20	0.17	0.20	0.19	0.18	0.17	0.40	1.75	0.42	27
24	3.16	1.30	24,058	68,937	25,040	0.19	0.00	0.19	0.19	0.19	0.18	0.40	1.77	0.47	25
25	2.91	1.24	24,619	67,165	26,887	0.20	0.00	0.19	0.19	0.19	0.18	0.40	1.64	0.47	25
26	2.84	1.14	26,243	65,591	28,049	0.21	0.16	0.18	0.19	0.18	0.18	0.40	1.60	0.46	24
27	2.61	1.03	27,291	64,172	28,118	0.21	0.15	0.17	0.19	0.18	0.18	0.40	1.58	0.45	23
28	2.38	0.99	25,222	62,781	27,152	0.20	0.16	0.17	0.19	0.18	0.18	0.40	1.52	0.48	24
29	2.34	1.11	22,226	61,383	24,872	0.20	0.32	0.17	0.19	0.18	0.18	0.40	1.63	0.47	23
30	2.61	1.32	19,663	59,992	22,589	0.21	1.68	0.17	0.19	0.19	0.18	0.40	1.66	0.45	21
31	2.31	1.00	17,744	58,629	20,608	0.21	1.87	0.17	0.18	0.18	0.18	0.40	1.68	0.45	21

Clifton Court Cl(mg/l)=200X EC - 25

e = Estimated

N.R. = No Record.

N.C. = Not computed due to insufficient data.

f = Excess Delta conditions with fish concerns.

r = Excess delta conditions with export/inflow ratio concerns.

s = Balanced water conditions with storage withdrawals.

dm = Daily Mean

md = Mean Daily

**Table 34. Pesticides, Herbicides, and Other Organic Substances Detected In the SWP**

**March 2004**

Sampling Location	Sample Date 1/	Chemical Detected	Concentration µg/l 2/
North Bay Aqueduct At Barker Slough Pumping Plant		No Sample	
California Aqueduct At Banks Pumping Plant	March 17, 2004	None Detected	
O'Niell Forebay Outlet Check 13	March 17, 2004	None Detected	
Delta Mendota Canal At McCabe Road	March 17, 2004	None Detected	
California Aqueduct Near Kettleman City (Check 21)	March 17, 2004	None Detected	
California Aqueduct At Tehachapi Afterbay (Check 41)	March 17, 2004	None Detected	
Devil Canyon Head Works	March 17, 2004	None Detected	

1/ Locations are normally sampled during March, June, and September. Monthly reports will include data for the month in which samples were most recently taken.

2/ Micrograms per liter.

**Table 35. Oroville and Delta Field Divisions Energy Data**

(in kWh)

**March 2004**

Date	Oroville Thermalito Complex		Barker Slough Pumping Plant	Cordelia Pumping Plant Load	Banks Pumping Plant		South Bay Pumping Plant Load	Del Valle Pumping Plant Load
	Generation	Load			Total Load	SWP Load		
1	16,326,432	0	9,751	21,371	4,447,488	4,447,488	134,040	699
2	17,166,240	0	9,744	21,651	4,393,728	4,393,728	142,475	700
3	14,805,792	0	9,891	19,845	3,676,800	3,676,800	161,730	711
4	9,261,792	0	9,940	20,510	4,301,568	4,301,568	159,310	719
5	7,689,312	2,304	8,939	18,095	4,311,744	4,311,744	220,245	722
6	8,183,808	2,592	9,037	20,139	4,200,960	4,200,960	191,390	728
7	8,679,456	0	9,219	22,239	4,219,392	4,219,392	217,780	694
8	10,694,880	0	10,227	21,826	4,219,200	4,219,200	238,760	708
9	3,874,752	4,320	5,992	8,974	4,408,128	4,408,128	221,130	719
10	2,297,952	6,336	791	2,282	4,298,112	4,298,112	229,615	731
11	2,972,448	4,320	343	399	4,298,688	4,298,688	272,740	717
12	2,648,736	4,032	336	392	4,307,904	4,307,904	292,220	706
13	805,536	7,776	336	378	4,320,384	4,320,384	293,185	708
14	1,407,456	2,414,592	343	385	4,312,896	4,312,896	245,330	711
15	4,151,232	1,266,336	343	399	4,516,032	4,516,032	189,680	714
16	5,240,736	2,880	350	406	3,864,000	3,864,000	189,730	713
17	7,050,816	0	329	399	3,635,136	3,635,136	183,120	714
18	6,182,208	0	322	399	3,658,560	3,658,560	189,340	719
19	6,163,200	0	322	385	3,683,712	3,683,712	220,810	709
20	9,923,328	0	343	378	3,693,120	3,693,120	277,105	708
21	10,813,248	0	336	371	3,449,472	3,449,472	326,040	700
22	10,529,856	0	322	364	3,232,128	3,232,128	370,790	703
23	8,328,672	0	343	378	3,077,376	3,077,376	348,435	698
24	12,736,512	0	315	385	2,998,656	2,998,656	465,820	6,200
25	12,784,320	0	315	336	3,687,744	3,687,744	502,460	13,584
26	9,695,808	0	315	392	3,672,960	3,672,960	497,765	18,477
27	4,334,688	4,032	9,471	371	3,661,824	3,661,824	492,165	19,211
28	4,071,168	0	2,478	371	3,700,416	3,700,416	482,370	19,094
29	10,275,552	0	336	378	3,753,792	3,753,792	490,445	18,949
30	4,083,264	1,728	3,766	6,881	2,881,152	2,881,152	496,295	18,884
31	4,862,304	4,608	4,592	10,059	3,114,432	3,114,432	492,465	18,764
Total	238,041,504	3,725,856	109,487	201,138	119,997,504	119,997,504	9,234,785	149,514

**Table 36. San Luis Field Division Energy Data**

(in kWh)

**March 2004**

Date	Dos Amigos Pumping Plant		Gianelli Pumping-Generating Plant			
	Total Load	SWP Load 1/	Total Generation	SWP Generation 1/	Total Load	SWP Load 1/
1	899,856	728,856	0	0	5,759,424	4,859,424
2	860,976	689,976	0	0	4,788,000	3,222,000
3	951,408	780,408	0	0	5,383,584	3,709,584
4	980,064	809,064	0	0	5,395,968	3,847,968
5	1,071,504	900,504	0	0	4,901,184	2,327,184
6	1,263,456	1,092,456	0	0	6,686,784	4,454,784
7	1,280,880	1,112,880	0	0	5,787,936	1,659,936
8	1,683,792	1,512,792	0	0	2,675,808	987,808
9	1,919,808	1,748,808	0	0	3,306,528	1,128,528
10	2,104,128	1,933,128	0	0	4,002,912	1,876,912
11	2,183,472	2,012,472	0	0	2,695,392	211,392
12	2,422,224	2,251,224	1,310,688	1,310,688	1,979,424	-45,576
13	2,166,768	1,995,768	0	0	2,393,856	13,856
14	2,344,464	2,176,464	0	0	3,426,624	-7,376
15	2,032,848	1,861,848	0	0	1,348,416	5,416
16	2,024,640	1,853,640	0	0	3,347,712	1,885,712
17	2,009,232	1,694,232	0	0	1,158,336	206,336
18	2,130,192	1,647,192	889,632	889,632	12,384	12,384
19	2,164,464	1,681,464	542,880	542,880	10,656	10,656
20	2,205,216	1,722,216	1,181,664	-18,336	9,792	9,792
21	2,111,760	1,631,760	0	0	19,296	19,296
22	1,749,744	1,266,744	194,400	194,400	19,872	19,872
23	1,820,736	1,337,736	0	0	269,856	269,856
24	2,120,688	1,502,688	1,075,968	75,968	1,683,072	1,683,072
25	2,113,488	1,495,488	1,461,888	-38,112	1,032,768	1,032,768
26	1,981,584	1,363,584	667,872	-32,128	1,586,880	1,586,880
27	1,636,992	1,018,992	0	0	2,875,392	2,875,392
28	1,793,088	1,169,088	0	0	2,870,496	2,870,496
29	1,726,848	1,203,848	0	0	1,708,416	1,708,416
30	1,413,360	795,360	0	0	2,420,640	2,420,640
31	1,662,048	1,044,048	0	0	1,901,376	1,204,376
Total	54,829,728	44,034,728	7,324,992	2,924,992	81,458,784	46,067,784

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

**Table 37. San Joaquin Field Division Pumping Plant Energy Load Data**

(in kWh)

March 2004

Date	Coastal Branch					California Aqueduct			
	Las Perillas	Badger Hill	Devils Den	Bluestone	Polonio	Buena Vista	Teerink	Chrisman	Edmonston
1	4,134	9,408	30,630	27,940	31,060	883,872	948,384	2,118,240	7,858,800
2	4,270	9,728	33,475	32,435	34,875	951,624	1,054,728	2,383,200	8,840,880
3	3,972	9,328	28,305	26,120	29,500	1,021,392	1,138,320	2,523,744	9,182,160
4	6,466	15,304	35,970	34,000	36,810	1,130,328	1,220,760	2,740,320	10,243,440
5	7,812	19,152	35,580	33,585	36,510	1,163,736	1,264,824	2,873,952	10,735,920
6	8,006	20,032	30,660	29,135	32,010	1,181,232	1,292,616	2,855,808	10,500,480
7	5,908	13,552	33,410	31,380	32,700	1,226,808	1,340,136	3,024,576	11,153,520
8	20,852	54,048	20,710	18,935	21,415	1,071,864	1,186,200	2,640,672	9,681,840
9	28,142	68,592	37,550	35,635	38,580	1,172,736	1,226,952	2,726,784	10,037,520
10	29,438	77,696	36,555	34,785	36,630	1,033,272	1,109,304	2,514,528	8,920,800
11	27,954	71,464	37,680	36,120	39,550	1,221,480	1,287,360	2,871,072	10,408,320
12	28,176	71,864	38,845	36,540	39,635	1,310,328	1,363,032	3,010,464	10,879,920
13	47,620	126,048	43,165	41,035	44,565	1,206,360	1,328,400	2,946,240	10,850,400
14	38,638	98,752	56,635	52,920	57,795	1,350,360	1,376,136	3,055,968	11,088,000
15	22,156	56,296	32,330	30,190	33,185	1,322,856	1,489,968	3,311,136	12,047,040
16	27,792	70,480	49,390	46,700	49,890	1,407,096	1,462,752	3,234,240	11,702,160
17	26,692	66,184	38,655	36,495	38,875	1,266,768	1,291,248	2,835,360	10,252,800
18	26,992	68,104	42,760	39,940	44,130	1,365,912	1,472,112	3,239,712	11,763,360
19	27,488	68,968	50,105	47,270	50,050	1,333,512	1,348,704	2,925,792	10,463,040
20	41,836	114,352	46,565	44,985	48,190	1,331,568	1,423,296	3,172,320	11,440,800
21	26,166	67,208	45,365	42,965	46,650	1,342,512	1,439,280	3,216,096	11,743,200
22	19,952	51,760	36,745	34,550	37,300	1,467,216	1,534,824	3,409,056	12,501,360
23	25,606	64,512	38,085	35,215	38,115	1,345,320	1,440,648	3,171,456	11,526,480
24	24,144	61,784	37,635	35,360	37,950	1,365,192	1,476,432	3,229,920	11,675,520
25	29,534	87,824	54,760	51,135	55,285	1,598,760	1,696,824	3,782,592	14,157,360
26	30,674	75,824	46,250	43,440	45,650	1,582,560	1,749,672	3,930,048	14,343,120
27	25,888	70,352	38,890	37,155	40,870	1,392,552	1,485,216	3,323,232	12,321,360
28	22,162	57,328	42,795	40,190	44,040	1,443,744	1,561,680	3,498,336	12,756,960
29	15,660	38,704	38,565	35,620	38,515	1,395,504	1,489,248	3,318,912	12,218,400
30	18,526	47,728	41,495	39,300	42,635	1,391,040	1,485,504	3,320,352	11,970,720
31	17,848	44,584	39,945	37,655	41,310	1,499,184	1,604,880	3,526,272	13,198,320
Total	690,504	1,776,960	1,219,505	1,148,730	1,244,275	39,776,688	42,589,440	94,730,400	346,464,000

**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2004**

Date	West Branch			East Branch			
	Oso Pumping Plant Load	Warne Powerplant Generation	Castaic Powerplant SWP Generation	Alamo Powerplant Generation	Pearblossom Pumping Plant Load	Devil Canyon Powerplant Generation	Mojave Siphon Powerplant Generation
1	395,136	1,041,408	1,707,000	241,080	1,339,080	2,613,120	150,549
2	458,640	1,143,720	1,680,000	258,356	1,343,268	2,196,000	149,709
3	458,192	1,064,304	1,680,000	271,040	1,324,632	2,421,888	158,970
4	466,648	1,044,864	1,680,000	278,656	1,961,664	3,405,696	220,773
5	477,512	1,020,960	1,680,000	305,928	1,854,564	3,142,464	222,684
6	473,312	1,039,176	1,680,000	334,964	1,760,832	3,343,584	210,714
7	457,128	893,520	1,680,000	377,776	2,067,360	3,485,856	251,118
8	450,520	1,118,880	1,680,000	294,056	1,519,212	3,518,304	175,182
9	453,432	955,296	1,680,000	321,020	1,709,424	3,598,464	191,268
10	434,448	1,012,896	1,680,000	237,412	1,398,168	3,384,768	149,835
11	463,232	1,108,728	1,680,000	318,024	1,722,108	3,699,552	210,567
12	491,176	1,064,376	1,680,000	329,476	1,844,640	3,321,984	223,419
13	472,696	1,108,440	1,680,000	329,532	1,960,980	3,631,488	234,843
14	455,224	1,042,920	1,680,000	379,120	1,935,360	3,341,664	229,887
15	574,280	1,278,144	2,040,000	347,508	1,929,720	3,704,736	240,240
16	556,640	1,312,560	2,040,000	352,716	1,943,388	3,295,296	227,073
17	418,712	1,228,752	2,040,000	324,856	1,963,356	3,346,272	235,200
18	555,800	1,416,240	2,040,000	349,328	1,807,404	3,309,792	208,362
19	542,080	814,752	2,040,000	291,704	1,702,356	3,594,528	219,450
20	540,344	1,219,248	2,040,000	357,644	1,774,764	3,224,928	200,214
21	622,048	1,284,624	2,040,000	335,468	1,707,684	3,509,376	201,264
22	651,448	1,467,360	2,400,000	325,724	1,876,944	3,476,064	231,777
23	597,744	1,491,336	2,400,000	307,244	1,685,736	4,000,128	180,012
24	654,864	1,505,160	2,400,000	283,416	1,869,408	4,053,984	211,302
25	641,928	1,410,552	2,400,000	382,172	2,244,192	3,738,336	275,730
26	682,808	1,357,416	2,400,000	392,700	2,335,512	3,334,752	292,635
27	612,248	1,422,216	2,400,000	342,132	1,964,952	3,282,912	228,417
28	674,856	1,457,568	2,400,000	361,004	1,908,156	3,173,280	243,411
29	647,752	1,471,608	2,400,000	314,272	1,818,108	3,295,488	234,087
30	650,104	1,462,968	2,400,000	317,996	1,719,540	3,195,648	186,858
31	646,800	1,502,784	2,880,000	377,468	2,180,052	3,594,432	261,870
Total	16,677,752	37,762,776	62,307,000	10,039,792	56,172,564	104,234,784	6,657,420